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STUDENTS' MANUAL

... OF ...

MEDICAL JURISPRUDENCE.

BLACKMER.

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STUDENTS' MANUAL

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MEDICAL JURISPRUDENCE

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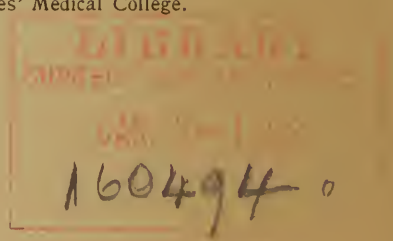
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DEDICATION.

TO MY CLASSMATES:

Chas. Dexter Ball and Ernest E. Brunstorph, whose friendship I have valued, both in youth and manhood, and whose ability as students in college won for them the respect and praise of those who had the honor of being their instructors, and whose skill, kindness and geniality, as practitioners of medicine and surgery, have been the pride of the communities which they graced with their presence, this book is affectionately dedicated.

In this book style and elegance of diction are sacrificed to brevity.



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INTRODUCTION.

As physicians and surgeons, we owe a duty to our country and to society at large, which society has no intention of allowing us to disregard or avoid. As citizens of the country, we are supposed to be protected by its laws, and it is the duty of each and every one to support and defend those laws, so far as they are good, upon all occasions. We should see that justice is administered within our borders, without respect of persons. Crime must be suppressed and violence punished, so that truth, honor and right living may have their due reward.

The peculiar knowledge which we, as physicians, possess for the purpose of healing the sick and relieving the distressed will often disclose to us the secret of crime, when the ordinary mind would remain in ignorance of it. In the practice of our profession, we are led into the presence of the evidences of crime much more frequently than are men in the ordinary walks of life. The doctor is summoned to the bedside of the suffering and the dying, no matter what the train of circumstances may have been that brought them to that condition. The wound, made by the hand of the assassin, needs the bandage and the healing balm, as much as the wound received in the casualties of regular life. The symptoms of pain and distress, produced by poison feloniously administered, require alleviation no less speedily than the suffering of natural disease.

Unaccustomed, as medical men are, to having their dictum questioned, they have no means of knowing, until tried, how many of their moss-grown opinions will fall, shattered to the ground, without the least knot or shred of truth to support them, at the merest breath of cross-examination. This they will find to be a sad and melancholy fact the first time they try it, and if they go to meet these trials of their faith unprepared, they will suffer the pangs of endless regret.

Much of our practice is empirical, founded on experience and recommendation of so-called authorities, and often incapable of lucid explanation. Reasons for a line of practice which would seem good and sufficient to us would hardly satisfy a court of law, even if they could be intelligently explained. Without practice and experience in speaking before the public, we can hardly realize the difficulty of elucidating, to the laity, those facts which have become almost a second nature to us, to say nothing of making an ignorant jury grasp an idea, which is not over and above clear and distinct to our own minds.

A sharp opposing attorney, a prejudiced and pig-headed judge, an idiotic or imbecile jury, are horrors which can hardly be over-estimated, and the physician who would face them to obtain justice, either for himself or others, must be capable, and well and recently posted, if he expects to come out of the fray without a blemished reputation.

Most of the facts with which we, as medical jurists, have to deal, are taught elsewhere, but the arrangement and concentration of them can be learned only from the Professor of Medical Jurisprudence.

Ingratitude and avarice are rampant in the world, and it is impossible to be always successful in practice. Many circumstances tend to nulify your most skill-

ful operations and destroy the effect of your best work. You, yourself, will be drawn before the judgment seats to make the best defense you can against the charge of malpractice of your profession. All the savings of your years of industry may be swept away in a moment, and your good name, better than gold, which you have won by toil and privation, be lost, and you become, in reputation at least, that which you despise. It is necessary that you know how to defend yourself in the line of practice which you adopt, and know what your privileges are before the law, and what is expected and required of you at its hands, as an exponent of a learned profession. This necessity for a knowledge of medical jurisprudence arises almost invariably out of the treachery of your brother practitioner. No suit for malpractice was ever brought, unless it was tacitly, at least, advised by some envious brother practitioner. "A man's foes are they of his own household."

The personal influence of the physician will be made much stronger by his having occupied the position of medical jurist, or it will be annihilated altogether. Ignorance and deception may, like death, be triumphant in the sick room, without being called to account, but in open court they can find no refuge or protection, and will certainly be exposed. The preacher and the lawyer are continually before the public and the latter has a much better chance of judging what they know by what they say. The physician has few opportunities of distinguishing himself publicly, and is erroneously estimated by the people, because his success in practice or financially is often due to any thing else but real merit. Here in court, however, the physician has the chance of his life to show what manner of man he is, the extent of his knowledge, and how he handles and applies it. True greatness is sure to be acknowledged, sooner or later. The time and chance for its display may not be favorable, but in the course of a life-time, the opportunity will come to the physician, the same as to others, and if he possesses the real, solid elements of knowledge and worth, these qualifications are bound to be proclaimed and owned.

So, enter the witness box well prepared, be calm and clear, be dignified and honest, irrespective of the opinions of the court, jury, attorneys, society, or the result. Make no pretense. If you can throw no light on the question at issue, candidly say so, and you will leave the stand with the reputation and credit of an honest man. If you are worthy of the position you are called to fill, the value of your services is inestimable. It is the only chance a medical man has of vindicating a worthy profession and a noble manhood. Fraud and violence must be detected and punished, unmerited infamy and death prevented, the widow and orphan saved from ruin, virgin purity and chastity and innocence protected, conjugal harmony and happiness restored, and unjust demands upon the services of your fellow citizens obviated. Character and reputation, the most valued possessions of humanity, are placed in your keeping. See that when "weighed in the balance" you are not found wanting, either in industry or learning, or the moral qualities that are so essentially necessary for success as a medical jurist.

I freely acknowledge, with respect and thanks, that I have drawn largely from ideas expressed in the introduction given in "Taylor's Medical Jurisprudence," and frequently I have quoted the language, there so beautifully presented.

STUDENT'S MANUAL OF MEDICAL JURISPRUDENCE.

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ST. LOUIS, MO.

CHAPTER I.

THE PROCESS OF LAW.

Question. What is Medical Jurisprudence?

Answer. It is the art of applying the knowledge gained in the study and practice of medicine to the purposes of law.

Ques. In what sort of cases does the law require medical aid to assist them in arriving at conclusions?

- Ans. 1. Physical injuries by force.
2. Violent deaths.
3. Personal identity.
4. Insanity.
5. Wills.
6. Malpractice.
7. Survivorship.
8. Life insurance.
9. Slander and libel.
10. Pregnancy and delivery.
11. Abortions and infanticide.
12. Legitimacy.
13. Divorce and annulment of marriage.
14. Impotency and sterility.
15. Sexual malformations.
16. Rape and assault with intent to rape.
17. Unnatural sexual crimes.

Ques. Where does the physician obtain this knowledge?

Ans. It is comprised in the branches of study that go to make up the Medical College Curriculum.

1. Anatomy.
2. Physiology.
3. Pathology and Morbid Anatomy.
4. Histology, Microscopy and Bacteriology.
5. Chemistry.
6. Pharmacy.
7. Materia Medica.
8. Botany.
9. Hygiene.
10. Therapeutics.
11. Practice of Medicine, general and special.
12. Practice of Surgery.
13. Obstetrics and Embryology.

Ques. If the student obtains the requisite knowledge in the study and practice of these branches, why need he study Medical Jurisprudence?

Ans. To assist him in concentrating his

varied knowledge upon any case at issue, and to so improve his powers of observation and description, and to give him such information of the purposes and processes of law, and of his duties as a medical jurist, that he may aid the officers of the court intelligently.

Ques. In what capacity may a medical man render assistance to the courts and their officers?

Ans. As a medical witness, as assistant counsel, and as an expert.

Ques. How many kinds of Law are there?

Ans. Two—Statute and Common Law.

Ques. How are these defined?

Ans. 1. Statutes are the expressed commands of the governing power. They prescribe what the people shall and shall not do, how they shall do it, and designate penalties for disobedience.

2. Common Law is Scientific Law. It is the custom and usage of a country. It gives the rules by which cases have been previously decided, and using these decisions as a precedent, endeavors to decide present cases in the same way. It attempts to base its decisions on reason, and the natural rights of men.

Ques. How are laws administered and enforced?

Ans. By means of courts and their officers.

Ques. How are courts classified?

Ans. According to the nature and importance of the cases that come before them.

Ques. What two kinds of courts have we?

Ans. Regular and Probate.

Ques. How are these defined?

Ans. 1. Regular courts deal with the affairs of living, responsible men.

2. Probate courts administer on the estates of the dead and care for the interests of the irresponsible.

Ques. Into what two kinds are regular courts divided, as regards the nature of the cases tried by them?

Ans. Civil and Criminal.

Ques. How are these defined?

Ans. 1. Civil courts settle differences between man and man.

2. Criminal courts are for the purpose of detecting and punishing violations of Statute Law.

Ques. How are civil courts divided as regards the importance of the cases brought before them?

- Ans. 1. Justice Courts.
2. Circuit Courts.
3. State Supreme Courts.
4. United States District Courts.
5. United States Supreme Court.

Ques. How are criminal courts divided as regards the importance of the cases brought before them?

- Ans. 1. Police Courts.
2. Courts of Criminal Correction.
3. High Criminal Courts.
4. State Supreme Courts.
5. United States Supreme Court.

Ques. What is meant by an appeal?

Ans. When either party to a suit is dissatisfied with the result of a trial, by paying a certain sum of money, he is allowed to have his case tried by a higher court. Appeals to the State Supreme Court are only allowed on points of law, the merits of the case must be decided by the trial court. Appeals to the United States Supreme Court are only allowed on questions, involving a citizen's rights as guaranteed by the Constitution of the United States.

Ques. What is meant by a change of venue?

Ans. When either party to a suit can show just cause for believing that the officers of one court would be unable to render justice in his case, on account of interest or prejudice, he is allowed to have his case tried in another court, of equal jurisdiction, situated elsewhere; or the suspected officer changed, during the hearing of his case.

Ques. What is the judgment of a civil court?

Ans. For the Plaintiff or for the Defendant.

Ques. If for the Plaintiff, how is the award expressed?

Ans. In a certain amount of money, as damages or rights, together with the costs of the suit.

Ques. What is the judgment of a criminal court?

Ans. Guilty or not guilty.

Ques. If guilty, how is the judgment awarded?

Ans. By certain punishment for violation of law, generally in the form of a fine, imprisonment, either with or without hard labor, or some bodily or capital punishment.

Ques. What is the object of all punishment?

- Ans. 1. For example to others.
2. To protect society.
3. To reform the offender.

Ques. Does capital punishment fill either of these requirements?

Ans. It does not. If it was such a good example to others, the law would require it to be made as public as possible. On the contrary these exhibitions are always brutal, and stir up the worst passions in people, and where they are used, it has been found necessary to make them strictly private, lest debauches of similar crime follow hard upon. That they fail to protect society is proven by the fact that murder and treason still exist. Such crimes are not more rampant in those states where such punishment has been abolished. As far as the reformation of the offender goes, that much desired possibility is lost sight of entirely?

Ques. What fact in regard to punishment does act to protect society, serve as an example and reform the offender?

Ans. The certainty rather than the severity of punishment.

Ques. What unfavorable result follows when the punishment for a certain crime is unreasonably severe?

Ans. Juries fail to convict, and criminals are not punished at all, and this fact serves as an inducement to crime rather than a deterrent from it.

Ques. What is the natural law in regard to punishment?

Ans. In disobeying the natural physical laws, the just and adequate punishment is certain and follows hard upon the violation. Moral—"Make the punishment fit the crime."

Ques. What is the judgment of a Supreme Court?

Ans. It is to affirm or reverse the judgment of the trial court.

Ques. If the judgment of the lower court is reversed, what follows?

Ans. The case is sent back to the trial court to be again tried on its merits, when the same evidence and procedure have to be gone over as before.

Ques. Who are the parties to a civil suit?

Ans. The Plaintiff or party bringing the action and the Defendant or party denying the claim.

Ques. Who are the parties to a criminal suit?

Ans. The state or prosecution and the Prisoner at the bar.

Ques. Who are the dramatis personae in a Probate court?

Ans. A judge, clerk, attorneys or counsel, witnesses, heirs, minors, irresponsibles, administrators, executors, guardians, claimants and jury, or lunatico inquirendo, when called, and constable.

Ques. What are their duties?

Ans. 1. It is the duty of the judge to preside over and keep order in the court, appoint administrators, executors and guardians, to render judgment in the absence of a jury, fix the amount of bonds, appoint appraisers, allow claims, commit the insane to

asylums and see that justice is administered according to common law and statutes made and provided.

2. It is the duty of the clerk to keep a written record of all the proceedings and rulings of the court, make out all warrants and administer oaths.

3. The attorneys or counsel represent the parties to any suit, the claimants and heirs.

4. Witnesses are to furnish testimony in regard to facts within their knowledge.

5. Heirs are the natural inheritors of a person's estate after his death, usually his next of kin, or legatees mentioned in his will.

6. Administrators and Executors are the custodians of an estate after the owner's death.

7. They may be appointed by the court, elected by the people, or appointed by the owner of the estate in his will. They are required to furnish good and sufficient bond for the honest discharge of their duty.

8. Guardians have charge of the persons and estates of minors and irresponsibles.

9. Claimants are people having a claim against an estate in the shape of a debt, as an heir or legatee in a will.

10. Minors are persons under twenty-one years of age.

11. Irresponsible persons are such by reason of idiocy, imbecility or acquired insanity.

12. A jury is summoned to hear evidence and render a decision in regard to the justice of a claim.

13. A Lunatico Inquirendo is a jury for the purpose of deciding as to a person's mental responsibility.

14. The Constable is to serve warrants, summon witnesses, and execute the orders of the court.

Ques. When does a minor become of sufficient age to choose his or her own guardian?

Ans. At fourteen.

Ques. At what moment does a minor become of age?

Ans. The law does not recognize any part of a day, so he becomes of age on the first instant of the day preceding his twenty-first birthday.

Ques. Who are the *dramatis personae* in a civil court?

Ans. A judge, clerk, jury, counsel for plaintiff, counsel for defendant, sheriff, constable and witnesses.

Ques. What are their duties?

Ans. 1. The judge is to preside over the court and see that all proceedings are according to common law and statute, and to instruct the jury on points of law.

2. The duty of the clerk is the same as in the Probate court.

3. The jury are twelve or six persons whose duty it is to hear the evidence and the law and decide between the two parties accordingly, without prejudice or partiality.

4. The counsel represent the parties to the suit.

5. The sheriff and constables serve all notices for witnesses to appear in court, attach property, and execute all judgments.

6. The duty of witnesses is the same as in the Probate court.

Ques. Who are the *dramatis personae* in a criminal court?

Ans. A judge, clerk, coroner, grand jury, petit jury, counsel for the prosecution, counsel for the prisoner, officers of the police, witnesses, bondmen, jailors, executioners, wardens of penitentiaries.

Ques. What are their duties?

Ans. 1. The duty of the judge is the same as in civil courts, and also to fix the amount of bail, to pass sentence after conviction, to issue warrants for the arrest of suspected persons.

Ques. What offenses are unbailable?

Ans. Murder and treason, those offenses punishable by capital punishment.

Ques. Why is bail allowed in ordinary cases?

Ans. Under monarchical governments, persons were frequently arrested and confined in prison for long periods of time, without being brought to trial or even knowing what offense they were accused of. In this way they had no means of procuring evidence of their innocence or supporting their families while awaiting trial. Our Constitution provides that every person accused of crime may have a speedy and impartial trial, and be confronted by his accusers in open court.

Ques. What is meant by a writ of Habeas Corpus?

Ans. It is a right guaranteed by the Constitution, whereby the prosecution can be compelled to at once try a man, bail him or discharge him.

2. The duties of the clerk are the same as in the Probate and Civil courts.

3. The duties of the coroner are to conduct investigations relative to cases of sudden or violent deaths.

Ques. What is this inquiry called?

Ans. An inquest.

4. The duties of the grand jury are to examine the evidence against the prisoner and ascertain if it is strong enough to warrant a trial of the case; if so, to bring in a true bill or indictment, to examine into any supposed violations of law to which their attention is called by the presiding judge in his opening charge, and indict those against whom there is sufficient evidence of guilt to warrant holding a trial.

Ques. What is an indictment or true bill?

Ans. It is a written accusation, stating the nature, time and manner of a crime.

5. It is the duty of the petit jury to hear all the evidence both for and against the prisoner, listen to the arguments of the counsel and the charge of the judge, relative to points of law involved, and render a verdict

of guilty or not guilty, as charged in the indictment.

Ques. If the verdict be not guilty and the prisoner be discharged, can he ever be brought to trial again for the same offense?

Ans. He cannot, because the Constitution provides that a person cannot be placed in jeopardy of life and limb twice for the same offense.

6. The counsel represent the parties to the suit.

7. The duty of the police is to arrest all persons seen violating the statutes, to serve notices for appearance in court of witnesses and execute the orders of the court.

8. The duty of witnesses is the same as in the other courts.

Ques. How many kinds of Medical Witnesses are there?

Ans. Three—common, learned and expert.

Ques. How are these defined?

Ans. A. The common witness simply relates facts within his or her knowledge, which have reference to the case at issue. The medical man is as liable to witness violations of the law or know facts concerning them as any other person.

B. The learned witness is summoned for the purpose of instructing the court in regard to facts peculiar to his profession.

C. The expert witness is called for the purpose of hearing the evidence in the case and expressing his opinion as to what the facts imply, or answering hypothetical questions, which he is supposed to be particularly competent to do, on account of his peculiar knowledge and experience in similar cases.

9. Bondsmen are men who agree to pay the court a certain sum of money or present the bailed prisoner at a certain time for trial. These men must be owners of real estate in the city or county where the bond is given.

10. The jailer has charge of unbailed prisoners while under arrest and awaiting trial.

11. It is the duty of the executioner to inflict the death penalty or any other bodily punishment which may be adjudged, under the law. In this state that duty is usually performed by the sheriff.

12. The warden of a penitentiary has charge of convicts, while serving the sentence of the court.

Ques. What is meant by pleading?

Ans. When the accused is brought before the court, the indictment is read and the accused is asked the question "Are you guilty or not guilty?" If he replies "guilty," a trial is unnecessary, and he is at once sentenced by the judge, but if he replies "not guilty," it means that he is willing to stand his trial.

Ques. What is meant by onus of proof?

Ans. The burden of proof. All persons are deemed innocent until proved guilty, therefore the burden of proof falls upon the side of the party that states the affirmative,

viz.: the plaintiff in a civil suit and the prosecution in a criminal suit.

Ques. How is proof obtained?

Ans. By written documents and the statements of witnesses, also by material objects presented as evidence.

Ques. What are the qualifications of a witness?

Ans. He must be of sound mind and of sufficient age to understand the import of an oath.

Ques. What is an oath?

Ans. Every witness is sworn to tell the truth, the whole truth, and nothing but the truth, in relation to the case under consideration, by the help of God, thus not only recognizing the pains and penalties made and provided for perjury in this world, but a future state, in which the bearer of false witness may receive punishment at the hands of the Deity.

Ques. How are witnesses examined?

Ans. By conversation, etc., the questions being propounded by the counsel of either side or the judge, the answers given by the witness.

Ques. Are witnesses obliged under the penalties of contempt of court to answer all questions propounded?

Ans. A. They are not obliged to answer where the answer would tend to incriminate themselves.

B. They are not obliged to answer questions relative to information acquired by privileged communication.

Ques. What sort of communications are considered privileged?

Ans. A. All communications made by the husband to the wife or the wife to her husband, as neither can be summoned to testify, either for or against the other.

B. The communication of the penitent to his confessor, as the law has always seen fit to respect the religious confessional.

C. The communication of the client to his attorney, for the purpose of giving him the necessary information to conduct his case properly in the court.

D. The communication of a patient to his physician, which might have been necessary to enable the physician to treat his patient properly.

Ques. To what extent is this protection carried?

Ans. The witness is not only not obliged to impart such information, but is not allowed to give it and should he carelessly divulge such secrets he renders himself liable to a suit for damages to the party making such communication.

Ques. What are these examinations called?

Ans. 1. The direct examination by the attorney on whose side the witness was summoned.

2. The cross examination by the attorney on the opposite side.

3. The redirect examination by the first attorney for the purpose of explaining any new facts which may have been brought out by the cross examination.

4. The recross examination for the purpose of testing the results of the third examination.

Ques. What sort of questions are allowed to be asked in the direct examination?

Ans. Questions for the purpose of directing and arranging the evidence and refreshing the memory of the witness. No questions known as leading questions are allowed, except in cases where the witness can be shown to be hostile on the side of the case which summoned him. No question will be allowed concerning facts foreign to the point at issue.

Ques. What sort of questions are asked by the cross examiner?

Ans. Leading questions such as are calculated to test the truth of the former examination, questions which suggest the nature of the answer, which is generally yes or no.

Ques. What sort of questions are asked in the redirect examination?

Ans. Questions tending to explain the an-

swers given in the cross examination. They avoid bringing in any new matter not suggested already by the former examinations.

Ques. What is the purpose of the recross examination?

Ans. To test the truth of any answers the witness may have made in the redirect examination.

Ques. In what arrangement is the testimony in a case presented?

Ans. 1. Witnesses for the affirmative side of the case.

2. Witnesses for the denial of the charge or claim.

3. Witnesses in rebuttal of the denial.

4. Witnesses for the surrebuttal of the denial.

Ques. In what arrangement is the argument of the different counsel presented to the jury?

Ans. 1. Counsel for the prosecution or plaintiff.

2. Counsel for the prisoner or defendant.

3. Reply of the counsel for the affirmative side of the case.

4. Summing up of the counsel for the defense or prisoner.

CHAPTER II.

EVIDENCE.

Question. What two kinds of Evidence have we?

Answer. Direct and Circumstantial.

Ques. How are they defined?

Ans. 1. Direct or positive evidence is the evidence of eye witnesses to the commission of a crime or to the performance of some act. If a man swears that he saw another man stab a person, and the one stabbed then and there fall, bleed, and die, the evidence is positive as far as human testimony can make it.

2. Circumstantial evidence is made up of a great many facts, which taken together, go to prove the commission of a crime, or to establish a claim. It may be composed of the evidence to be derived from the supposed motive of the criminal, the manner of the crime, evidences of identity, alibies, etc.

Ques. How is Medical evidence rendered?

Ans. By means of medical written reports and oral questions and answers in the witness box.

Ques. What rules ought to be observed in giving and preparing medical testimony?

Ans. 1. Carefully distinguish between facts and opinions.

2. All medical reports and oral declarations should be clothed in plain, simple language, brief, and comprehensible by people

in the ordinary walks of life. No technical terms should be used unless explained.

3. There should be no evasive, exaggerated or undecided answers. State the facts directly as they exist.

4. In stating facts as such, insist on the truth of your answers; in stating opinions be more modest and state your reasons.

5. Study well the question on which you are about to give evidence before going into the witness box. Read every authority obtainable.

6. Read over carefully all previous testimony given by you in the same case.

7. Never quote authorities in the witness box; give everything as though you were the authority, and never admit any book to be an authority until you have taken it into your hand and read the passage quoted against you, for yourself.

8. Don't volunteer evidence unless it be a fact in your own knowledge.

9. In stating conversations with others, use the exact language, as near as possible.

10. Never betray professional secrets, except to save the innocent from serious punishment, and even then they should not be given unless you are positively sure that the information will accomplish the purpose for which it was meant.

11. In describing a locality or a scene of a crime, make a drawing or a photograph, if

possible, even a rough drawing is of great use.

12. Never lose your temper under cross-examination and treat the opposing counsel with all the courtesy that you can command. He is entitled to careful and conscientious answers.

13. If a question is asked you, the answer to which you do not know, say so, and don't allow this fact to be drawn from you by cross-examination.

14. You are not obliged to give opinions on matters which you do not understand.

Ques. What are the rules usually observed by courts relative to evidence in general?

Ans. 1. No evidence is allowed foreign to the point at issue.

2. Evidence, as to previous character, may be allowed, as the necessity for it shall appear:

A. In the convicted for the purpose of mitigating punishment.

B. In the accused for the purpose of showing the unlikelihood of guilt.

C. In the woman who accuses a man of rape, for the purpose of showing her likelihood of having consented to intercourse.

3. Hearsay is not evidence and will not be allowed unless the exact words of a person are quoted, and these words be the subject of the controversy, as in a libel or slander suit. One person having heard another swear in court to a certain fact, that person since dead, the former may state under oath, what he heard the latter swear to. A person heard making threats against another, afterwards murdered, the exact words he used may be the subject of controversy, hence such conversations may be repeated.

4. The law requires, when possible, that all witnesses shall be present in court and give their testimony where it can be subjected to cross-examination.

5. When a person is so sick as not to be able to attend court, or living at so great a distance that the expense would be out of reason, to bring him there, his deposition may be taken, on notice being given to the opposite party to the suit, so he could be present by counsel and cross-examine, if he so desires. The deposition should be taken by and sworn to before a magistrate and signed when finished both by the witness and by the magistrate.

6. No man can be compelled to furnish evidence against himself. He cannot be put on the stand or questioned, as in France, but if he once goes on the stand in his own behalf, he must submit to cross-examination, in regard to matters concerning which he testifies. In England, he would not be allowed to go on the stand in his own behalf.

7. No man can be compelled to answer a question whereby he might criminate himself. In old times people were frequently

put to the torture to make them confess crime.

8. A man's wife would not be allowed to testify either for or against her husband, nor the husband either for or against his wife except in cases where one sues for divorce, then such evidence may be essential.

9. The law requires all evidence to be given under oath or its equivalent.

Ques. What is the equivalent of an oath?

Ans. 1. An affirmation under the pains and penalties of perjury.

2. A dying declaration.

Ques. How are these defined?

Ans. 1. In some cases people have conscientious scruples against taking oaths—Quakers, for instance; these are allowed to make an affirmation. They simply say "I affirm" instead of "I swear" and "under the pains and penalties of perjury" instead of "so help me God."

2. When a man is immediately approaching his own death, and is thoroughly conscious of his coming dissolution, he is thought by the law to be in such a state of mind and conscience as would make any statement he might make relative to the cause of his own death, equal in effect to an oath.

Ques. What are the usual rules governing dying declarations?

Ans. 1. The person must believe he is in actual danger of death.

2. The person must believe recovery is impossible.

3. To make the declaration of use, he must die.

4. Such declarations cannot apply to matters of money or property.

5. They are good only in relation to the death of the person making them.

6. The person making the declaration must be in such a state of mind as would enable him to understand the import of an oath.

7. The declaration must be written in the exact words of the person making it, and as they are spoken or immediately after, if pen and paper be not at hand.

8. The person making the declaration should sign it if possible.

9. The declaration should be taken by a magistrate if one be obtainable, if not, by the attending physician.

10. The declaration has greater weight if made and signed in the presence of witnesses.

11. The taker of the declaration must not ask questions further than may be necessary to understand the import of what the maker of the declaration is saying.

Ques. What fees are allowed medical witnesses?

Ans. 1. When a medical man is called as a

common witness of fact within his knowledge, relative to the case at issue, he must be satisfied with the fee of an ordinary witness, made and provided by law, and he must obey the summons of the court or lay himself liable to an action for contempt of court.

2. When called simply as a learned man to instruct the court in relation to facts peculiar to his profession, or for the purpose of acting as assistant counsel, he is not obliged to obey the summons unless he is willing and may charge a reasonable fee for his services.

3. When summoned as a Medical Expert to hear testimony and give his opinion as to the import of such testimony, he is not obliged to attend in most states and can charge his own fee.

4. The summons does not always state that the witness is simply called as an Expert, and when it does not so specifically state, attendance on the part of the witness is obligatory. Then he is obliged to answer questions of fact, but is not obliged to answer questions of opinion without a reasonable fee.

Ques. Why is a physician not forced to answer questions of opinion or of fact, rela-

tive to his professional knowledge without his reasonable fee?

Ans. The law understands his professional knowledge to be his own property, for which he expended labor and money, and it cannot be taken for the public benefit without due and reasonable compensation.

Ques. What would be considered a reasonable fee for attendance on court?

Ans. 1. It must include the value of his services had he remained at home.

2. It should include his traveling expenses in reaching court and returning to his home.

3. It should include the expense for board while in attendance on court.

4. Some attention should be paid to the importance of the case.

5. There is always some permanent damage done to a physician's practice through a prolonged absence from home, which should also be taken into account.

Ques. How are cases brought before the criminal court?

Ans. 1. By arrest by the police.

2. By prosecuting witnesses swearing out warrants.

3. By coroner's inquests.

CHAPTER III.

CORONER'S INQUESTS.

Question. What are the powers of the Coroner?

Answer. A Coroner has almost unlimited power, as far as procuring information is concerned.

1. He can compel any person to attend the inquest and give information as a witness.

2. He can compel any citizen to serve on a jury.

3. He can enter any private or public building in search of evidence.

4. He can order the disinterment of a body.

Ques. What are the most important points covered by the statutes relative to the Coroner and his duties?

Ans. 1. His election and eligibility.

2. His qualifications, oath, bond, etc.

3. His deputies and subordinate officers.

4. His remuneration, fees, salary, etc.

5. His warrant requiring citizens, usually six in number to attend the inquest and serve on a jury.

6. Form of oath administered to the jury.

7. His warrant for summoning witnesses.

8. Form of oath administered to witnesses.

9. Power to draw money from the city or county treasury to pay witnesses and jurymen.

10. Power to draw money to pay for bringing a floating body to shore.

11. Power to draw money to pay for the burial of a body after the inquest.

12. Power to draw money to pay a physician for making a post mortem examination or a chemist to make an analysis of the contents of a stomach or intestines for detection of poison.

13. Necessity for recording all testimony and proceedings.

14. The record must be signed by each witness as he gives his testimony.

15. The verdict must be signed by the jury and the report of the entire proceedings by the Coroner.

16. The entire record and verdict of the inquest must be transmitted to the judge of some court of record, situated in the same jurisdiction.

17. There is a statute relative to the disposition of all money or other property found upon the body examined.

18. The power of the coroner to secure sufficient money from the estate of the deceased, if there be any estate, to pay the expenses of the inquest.

Ques. What are the duties of a Coroner's Inquest?

Ans. 1. To view the body and certify to the fact of death.

2. To ascertain the identity of the body.
3. To ascertain as near as possible the exact time of death.
4. To ascertain the cause of death.

Ques. Into what two stages or conditions may death be divided for purposes of study?

Ans. Somatic death and Molecular death.

Ques. How are these defined?

Ans. Somatic death is the departure of the soul from the body.

Ques. How is this evinced?

Ans. A. By insensibility and loss of consciousness, as far as outward appearances go.

B. By cessation of motion, relaxation of all the muscles, yet the latter retain the power of contracting under electrical stimulus. The soft parts adapt themselves to the surface on which the body rests.

C. By cessation of circulation and respiration.

D. By certain changes about the eye.

E. By certain changes in the skin.

F. Progressive cooling of the body.

Ques. What are the tests for the cessation of circulation?

a. On cutting the skin, no blood flows.

b. The blood follows gravity and sinks to the most dependent parts, rendering that surface of the body livid and the upper surface pale.

c. On applying heat to the skin, no water blister forms.

d. On the hypodermic injection of ammonia, no reddening of the skin occurs.

e. On holding the hand up to the light, it is perfectly opaque, instead of the light shining through pink, as in the normal state.

f. On tying a ligature around an extremity, no swelling occurs beyond the ligature.

g. No heart sounds are heard with the stethoscope.

Ques. What are the tests for the cessation of respiration?

Ans. a. The surface of a mirror is not moistened when held over the mouth.

b. No respiratory sounds are heard with the stethoscope.

c. A shallow dish of water, placed on the chest will indicate by ripples on the water the slightest motion of the chest.

Ques. What changes occur about the eye?

Ans. a. The eye sinks in the head from loss of power in the recti muscles.

b. The globe becomes flattened.

c. The cornea loses its lustre.

d. The iris loses its sensibility to light and hangs loosely, thus rendering the pupil irregular in shape.

e. The cornea loses its sensibility to touch.

f. There is loss of elasticity of the eyelids.

g. The conjunctiva loses its white, trans-

parent color and often turns black or gray, the pink vessels no longer show in fine lines.

h. Under the examination of the ophthalmoscope, the columns of blood in the veins of the fundus are found broken and beaded by gas bubbles and in a little while the vessels are completely emptied.

Ques. What fallacies appear in this test for death?

Ans. In some diseases the lustre and prominence of the eye may remain for a time after death. This is seen in apoplexy and poisoning by carbonic acid gas or illuminating gas; and in cases of violent collapse, as in cholera, the lustre and prominence of the eye may be lost while the person is yet alive.

Ques. What changes take place in the skin?

Ans. A. It loses its elasticity, so that when cut, the wound does not gape and the skin hangs loosely on the body.

B. The color becomes pallid on top and livid underneath.

C. All the muscular fibres in the skin are relaxed.

Ques. What facts are important in regard to the cooling process of death?

Ans. A. The cooling is progressive.

B. The temperature sinks no lower than that of the surrounding atmosphere.

C. In certain diseases, where from attendant collapse, the temperature sinks far below normal previous to death, it may arise for a time after death, even to a point much higher than the normal temperature of the body in health, or even to that of extreme fever.

D. The process of cooling is favored by nakedness and retarded by clothing, especially by woolen clothing.

E. The cooling process is more rapid in the thin and slower in the fat, the adipose tissue acting as a non-conductor.

F. The cooling process is more rapid in youth and old age than in adult life.

G. The cooling process is frequently not complete for twenty hours.

H. It is generally slower in sudden deaths occurring in health, than when the body is the subject of wasting disease.

I. The body will cool more rapidly where the exchange of air is free than when it is close.

Ques. In what way is the legal application of these facts important?

Ans. Knowing the cause of death, it is impossible to state the exact time a body would spend cooling, and knowing the time spent in cooling no opinion could be formed as to the cause of death.

Ques. From what must Somatic death be diagnosed?

Ans. A. From suspended animation due to trance, hibernation, hypnotism, etc.

B. From Catalepsy and Epilepsy.

C. From profound Syncope.

Ques. How is this diagnosis made?

Ans. By the signs of death already given; and in cases of suspected trance or hypnotism, I would suggest that a loud command to awake be repeated several times over the body. The reasons for this will be discussed under the department devoted to mental conditions.

2. Molecular death is the death of the cells of the body.

Ques. When does this ensue?

Ans. It generally begins about three or four hours after Somadic death, and is usually not complete for an hour after it commences.

Ques. How is this difference in time of appearance accounted for?

Ans. The cell life and the general life of the body are independent of each other, but under the system of division of labor, carried on in the working of the body, the cells are dependent upon the general life of the body for their continual existence. Somadic death shuts off the supply of oxygen and nutrition from the cells, and also all communication between them by arresting circulation, respiration and nervous action. When the food that the cells have on hand is consumed, they can only starve and perish. Their isolation prevents them from seeking any food for themselves.

Ques. How is this stage of death evinced?

Ans. 1. By Rigor Mortis.

2. By Putrefaction.

3. By Dessication or Mummification.

4. By Saponification.

5. By Petrification.

Ques. What is Rigor Mortis?

Ans. It is the stiffening of the body which comes on after death, due to the death of the cells and consequent coagulation of the Myosin in the muscles.

Ques. What are the important facts in connection with Rigor Mortis?

Ans. A. It comes on from two to four hours after death and lasts from six to twenty-four hours.

B. It comes on from above downwards and passes off in the same manner, the upper extremities becoming stiff first.

C. When a joint stiffened by Rigor Mortis is once bent, the joint remains flexible, like a broken tallow candle, or a piece of linen stiffened by starch.

D. The rapidity with which it appears and passes away is most effected and influenced by the state the muscles are in at the time of death as regard exhaustion. When exhausted by hard exertion or by wasting disease, the vitality of the cells is consequently low, Rigor Mortis comes on quick and passes away soon. When the muscles are full of vitality as in criminals executed after a few months' high living in

prison, the Rigor Mortis is slow coming on and lasts a good while.

Ques. What is a good example of this fact?

Ans. Animals killed after a prolonged chase stiffen very quickly and soldiers killed late in an engagement are frequently found stiffened in the very attitude in which the fatal shot was received, some kneeling with guns raised ready to fire. Cavalry men often sit for some time on their horses. Patients dying of consumption or prolonged suppuration very often become stiff in the act of dying, or even have their systems so reduced in vitality that Rigor Mortis is never noticed, it comes on and passes off so rapidly.

Ques. From what does Rigor Mortis have to be diagnosed?

Ans. A. From Hysteria.

B. From Catalepsy.

C. From Apoplexy.

D. From Epilepsy.

Ques. How is this diagnosis made?

Ans. a. From Hysteria, by the fact that in Hysteria the body is not dead and that the stiffness returns the moment a bent joint is released.

b. From Catalepsy by the fact that a limb remains in any position that you place it, thus showing that the person is not dead.

c. From Apoplexy and Epilepsy by the fact that respiration is still carried on.

d. In Rigor Mortis the muscles have lost their power of responding to the electric current.

e. The body takes and retains the impression of surface on which it was resting when Rigor Mortis took place.

Ques. Of what practical use is this fact?

Ans. It leads you to infer that a body has been moved from the locality where Rigor Mortis had taken place, when the impressions on its surface do not conform to the irregularities of the support on which it is resting.

Ques. What is putrefaction?

Ans. Putrefaction is those changes which spontaneously take place in a dead body, by which the complex, unstable, organic compounds of which a body is composed are broken up and their places taken by simple, stable inorganic compounds, produced from them.

Ques. What circumstances are necessary to the process of putrefaction?

Ans. 1. A certain temperature.

2. Presence of moisture.

3. Presence of atmospheric air.

Ques. What is the necessary temperature?

Ans. Between 32° and 125°F.

Ques. Why is this temperature necessary?

Ans. A temperature below 32 freezes the

body, thus preventing the process, while a temperature above 125 dries out the moisture and prevents putrefaction by depriving the body of the second essential condition.

Ques. What becomes of a body deprived of all moisture?

Ans. Dessication or Mummification takes place.

Ques. Where does this change take place as a natural occurrence?

Ans. In hot, dry atmospheres, like that of Peru and Egypt. In these climates, if the body is not devoured by wild beasts, it becomes a mummy.

Ques. Why is atmospheric air necessary to putrefaction?

Ans. It supplies the bacteria by which the disintegration is brought about.

Ques. What happens to a body when deprived of atmospheric air as when kept under water?

Ans. It undergoes saponification, *i. e.*, turns to adipocere.

Ques. What is adipocere chemically considered?

Ans. It is an ammoniacal soap formed by the union of the fats of the body and the ammonia gas, evolved in the decay of the albuminous parts of the body, rich in nitrogen.

Ques. How long does it take for a body to undergo complete saponification?

Ans. From four months to a year.

Ques. What are the prime factors in the dissolution of a body, left exposed or buried in porous soil?

Ans. 1. Noxious gases are formed and mingle with the atmosphere.

2. The presence of bacteria and other low forms of animal life have much to do with the breaking up of the cells and the formation of these gases.

3. The larvae of black flies devour much of the soft parts of the body. These are assisted by ants.

4. Beasts of prey and vultures eat and carry away the soft parts leaving the bones scattered around.

Ques. How is the rapidity of the process of putrefaction influenced?

Ans. 1. It is more rapid in favorable conditions such as hot, moist weather, in open air, the temperature being about 90°F.

2. It is more rapid in young, fat, or dropsical people, and where the tissues have been bruised and mangled previous to death.

3. It is less rapid in old, thin, and dried-up people.

Ques. When buried in a wooden coffin and in ordinary soil, how long does it take a body to become completely reduced to a skeleton?

Ans. About ten years.

Ques. What length of time would be required to reduce a body to a complete skeleton, freely exposed, top of the ground, un-

der the most favorable conditions, yet protected from wild beasts and birds of prey?

Ans. About seven months.

Ques. Under what circumstances will the personal identity of a body be preserved the longest?

Ans. 1. Dessication, combined with embalming or injecting the body with preserving fluids, calculated to destroy and prevent the action of bacteria.

2. Freezing. If a body be frozen and kept so, it will retain its identity for thousands of years, as seen in the case of the body of the mammoth found in the ice of Siberia.

3. Burial in metallic caskets, hermetically sealed, so that the body is completely deprived of air.

4. Saponification or change of the substance of the body into adipocere.

5. Petrification or turning to stone.

Ques. What is petrification or turning to stone?

Ans. When a body is placed in water or steamy vapor, strongly impregnated with salts of silica or lime, held in solution, as each cell of the body decays, its place is taken by a deposit of these salts, and thus the natural form and semblance of the body is preserved in the stone.

Ques. What are the external changes in putrefaction and their average duration?

Ans. Putrefaction begins as soon as rigor mortis passes away. It shows itself first in the form of a pale greenish discoloration over the abdomen, in the region of the naval, and a slight but quite perceptible odor. This appears generally at the end of the second or beginning of the third day.

In from three to five days after death, this green color becomes deeper and extends over the entire abdomen and genitals, and there will be found green spots of different sizes on other portions of the body, especially on the sides of the neck and between the ribs. The veins become dark, livid lines up and down the limbs.

In eight to twelve days after death the whole body presents a green appearance, which is very dark in color and is accompanied by a strong smell. On some parts as the face and neck the color is a reddish brown, on account of effusions of blood under the skin and through the pores of the skin under the cuticle. Gases have now begun to form and swell up the body. The sphincters have relaxed, but the nails are still adherent.

In from fourteen to twenty days after death the color is almost black. The cuticle is raised in air blebs, some of which have burst open. Maggots have appeared in great numbers. The cavities of the body are enormously distended with gas and the nails are loosened. By the end of the first month or the beginning of the second the

cavities have burst and discharged their contents and the bones of the fingers come away, if one attempts to lift the body by them.

In four to six months the internal organs have become liquified and the bones are all visible through the skin. The orbital cavities are empty, but the muscular structure can yet be made out in some parts of the body. The sex can only be distinguished by the shape of the bones or perhaps by the female uterus, which is sometimes long preserved.

In seven to nine months the soft parts are entirely consumed and the skeleton is naked.

Ques. From what combined circumstances are we to judge of the lapse of time since death?

Ans. 1. From the degree to which cooling has progressed.

3. From the presence or absence of electrical contractility.

4. From the stage of putrefaction.

CHAPTER IV.

PERSONAL IDENTITY.

Question. Into what heads may the study of the personal identity of the body be divided for purposes of study?

Ans. 1. The identity of the living.

2. The identity of the recently dead.

3. The identity of the charred, mangled or putrefying remains.

4. The identity of the skeleton.

Ques. From what facts do we make out the identity of the living or the recently dead body?

Ans. 1. From the recognition of witnesses.

2. From sex, age and occupation.

3. From clothing or weapons.

4. From height, size and measurement of features, as in the Bertillon system.

5. From foot prints and hand prints.

6. From handwriting.

7. From peculiarities of gait, movement, voice or language.

8. From personal abnormalities or deformities.

Ques. What are the main elements of uncertainty in recognition?

Ans. 1. Hair may change color with age and beards may be altered indefinitely. The hair may also be lost from disease.

2. Lameness may change gait and movement and by loss of teeth or obtaining false teeth, the voice may be changed.

3. Scars may disfigure the face.

4. Exposure, toil, privation and most of all dissipation will change all but the most permanent features.

5. Weight and size may change some with the state of health.

6. The face loses expression in death on account of the relaxation of the muscles. The florid complexion is also lost in pallor.

Ques. What are the most permanent and enduring characteristics of a man?

Ans. 1. Personal deformities and abnormalities.

2. Voice and manner.

3. Handwriting.

4. Measurement of head, foot and forearm.

5. Shape of the features.

Ques. From what circumstances do we judge of the sex of the human body?

Ans. From shape of body, physical conformation, hair, teeth, features and sexual organs, if present.

Ques. From what circumstances do we judge of the age of a body?

Ans. From size, weight, color of hair on head and body, condition of skin and flesh, condition of teeth, arcus, senilis, stooping gait, voice, ossification of the cartilages.

Ques. From what do we judge of the occupation?

Ans. Firm muscular development, callousities of the hands, the bronzing of exposure, the sort of clothing worn, evidences of care and refinement in the keeping of the body, cleanliness of skin, nails and teeth, and the shape of the hands and feet.

Ques. What facts might lead to the identification of the clothing?

Ans. The material, the state of wear, the style, the tailor or merchant's name, if attached, repairs, buttons, contents of pockets, agnus dei, rents, wounds and blood and earth stains, paint stains and splashes of mud, shirts, how long worn since washing, manufacturer's name, number, size, etc.

Ques. What should be noted as to weapons?

Ans. 1. What sort of a weapon, club, knife, pistol, gun, brass knuckles, slung-shot, etc.

2. Identity, style, shape, condition, maker's name, blood stains, rust, private marks, etc.

3. If pistol, what size shot, style of cartridge, if recently discharged or still loaded.

Ques. How are the features described?

Ans. 1. Eyes, shape, color, setting in head, distance apart, peculiarities.

2. Noses may be considered under nine varieties.

A. According to the straightness of the

line leading from the forehead to the end of the nose.

B. Line leading from the end of the nose to the upper lip.

(a) The former may be rectilinear, convex or concave.

(b) The latter may be either ascending, descending or horizontal.

Ques. What are the nine varieties?

Ans. 1. With line a convex and line b horizontal.

2. With line a concave and b horizontal.

3. With line a straight and line b horizontal.

4. With line a convex and line b ascending.

5. With line a concave and line b ascending.

6. With line a straight and line b ascending.

7. With line a convex and line b descending.

8. With line a concave and line b descending.

9. With line a straight and line b descending.

Ques. How are foreheads described?

Ans. In nine varieties, according to width, length of line between the hair and bridge of nose, angle of recession.

Ques. What are the nine varieties?

Ans. A. From width into broad, narrow and medium.

B. From height of hair line into high, low and medium.

C. From angle of recession into receding, perpendicular and projecting.

Ques. How are ears described?

Ans. According to the degree of attachment to the face of the lobe of the ear. The concavity in front of the helix. The presence of the point of Darwin. The size and length of the ear.

Ques. How is the mouth described?

Ans. According to the size, fissure of the upper and lower lips, the degree of curvature of the lips, whether the corners turn up or down and any other peculiarity that may be present.

Ques. How is the hair described?

Ans. Color, amount, curl, growth on neck, length, fineness, dye, baldness, where located, if any; style of cut and condition of scalp.

Ques. How can the part of the body whence a single hair came, be known?

Ans. 1. Head hairs in male, cylindrical, with blunt ends.

2. Head fair, female, longer, cylindrical, split ends from wearing off.

3. Pubic hair, flat, curled, split ends.

4. Beard hair curled, cylindrical, blunt ends from shaving or cutting.

5. Hair from moulting animals, short

with pointed ends, where the old hair broke off.

Ques. What points should be observed in the examination of foot prints?

Ans. 1. Take an impression in plaster, if possible.

2. Describe the size, number and individual peculiarities; give the exact measurement.

3. Give the distance apart.

4. Were they made by the bare foot or shod with boot or slipper?

5. Note if all the prints were from the same foot or feet, or made by several persons.

6. Note what sort of material they are on, whether in mud, or loam, or sand, or blood tracks on the floor; describe the locality.

7. Are they more indented at the toe or heel?

8. Note the direction in which they point.

9. Compare with any other boot presented.

10. Compare with any other foot exhibited.

11. Compare the mud or earth on boots with that of the locality where the foot prints are found.

12. If the tracks are in blood examine and observe if there be any blood stains on the boots or feet of the suspected party.

Ques. What is to be learned from foot prints?

Ans. 1. Whether the person making the tracks was alone.

2. Whether he was barefooted or shod.

3. In the size, shape and peculiar marking of the naked foot, no two persons are exactly alike, thus the identity of the track may be made out.

4. The direction from which the person making the tracks came and whither he went.

5. Whether he was running or walking, for in running the tracks are further apart and the toe much more indented than the heel.

Ques. What are the fallacies as to size in a footprint.

Ans. Footprints on muddy ground are apt to be larger than the foot that made them, on account of the clay stretching and the clay adhering to the boots being taken out. Tracks in the sand are apt to be smaller than the foot that made them, on account of the sand caving into the sides of the track and filling it up. On a side hill tracks in mud stretch very markedly, so that very little estimate of the size of the foot that made them can be formed. This is noticed at the margin of streams, especially after the banks have been recently flooded.

Ques. What points in relation to hand and finger prints are useful in making out personal identity?

Ans. The curved lines on the balls of the thumb and the ends of the fingers are never changed during life, and never alike in two different persons, so that an impression in ink or blood of the thumb or fingers will positively fix the identity of the party who made the impression if opportunity for comparison be allowed.

Ques. Where are these impressions most apt to be found?

Ans. On wall paper, on edges of doors and windows, on papers or documents or money stolen, on other objects handled, possibly on the white shirt bosom of a murdered man.

Ques. What facts in relation to handwriting are important in connection with the subject of identity?

Ans. 1. The identity of the specimen may be called in question for its own sake in case of signatures to wills, deeds, notes and other documents.

2. It is much more easy to disguise one's own handwriting than to imitate that of another.

3. Handwriting has an individuality easily recognized by familiarity and which is sometimes inherited.

4. This individuality lies in the shape and slope of the letters, in the manner in which letters and words are joined together and when the specimen is verbose in the manner of expression.

5. A man never writes his signature twice alike, so if exact duplicates are discovered one of them is certainly a forgery.

6. When signatures are first traced with a pencil and afterwards gone over with ink, it is often possible to show the pencil tracing, separate and distinct from the ink lines by magnifying a photograph of the sample.

7. The sense of handwriting seems to be located in the mind, so that by changing from the right hand to the left will not, as a rule, alter the essential and involuntary characteristics of the chirography, so that when no other disguise is adopted it is usually possible to identify the handwriting.

8. Paralysis is one of the most powerful causes of disguised handwriting, and mental trouble will exhibit itself in this manner more clearly than in any other. It shows itself by missing words and letters, by dashes and Italics, by sudden alterations in the line of thought, etc.

9. Experts wishing to become familiar with the handwriting of certain persons for the purpose of examining suspected forgeries usually procure as many specimens as possible of the person's acknowledged handwriting and pin them up about their offices, where they can see them frequently and thus become acquainted with the style without any special examination. After a time the suspected specimen is brought before them and they will be fully able from long ac-

quaintance to distinguish the true from the false.

10. It may be fully as important to prove that a certain specimen signature of a person is genuine as to show it to be a forgery, from a legal point of view.

Ques. What points about the hands and other portions of the body are of importance in determining the occupation of the person or dead body examined?

Ans. Certain callosities and deformities due to the peculiar manner in which tools are held and the attitude assumed while at work.

A. Jewelers are apt to present a retraction of the last phalanx of the left thumb.

B. Washerwomen present callosities of the upper extremities, where the arms lean on the tub or washboard, together with a swollen state of the skin of the fingers.

C. Metal workers and burnishers present in the right hand general callosity and blackness, the creases of flexion remaining unthickened and unstained. The last phalanx of the little finger is often found in a state of extreme flexion. In the left hand, the radial side of the index finger and the palmar surface of the thumb are very hard and callous.

D. Coachmen and drivers always present distinct callosities between the thumb and index finger and between the second and third fingers and between the third and fourth fingers of both hands, where the lines are held.

E. Shoemakers present callosities on the left hand, where the thumb and index finger hold the thread; the soft parts are broadened, the fold which separates the second and third phalanx of the index finger is cut by the thread in deep crevasses with hard edges. The fleshy part of the right thumb is spatulous in form. The nail of the left thumb is thick, brittle, dentated and crenated by the awl. There is also a depression of the chest which usually presents a distinct concavity. The hair bulbs over the anterior aspect of the thighs are obliterated by the lap stone and board.

F. Curriers and tanners present discolorations of a brownish nature over the hands, which turn black at once on being touched with a solution of iron. Their fingers are broad, particularly at the base.

G. Dressmakers and seamstresses present hardening of the end of the index finger of the left hand and the same pierced by numerous needle points. The skin is rough, thick and blackened.

H. Housemaids show callosities on the knees, which have often given rise to distinct inflammations of the bursae. This is also true of certain religious devotees, who are accustomed to remain for long periods of time on their knees.

I. Among iron-workers and seafaring men, and all who are accustomed to hard

labor, the palmar surfaces of the hands present a very great degree of hardness of the skin and deep fascia, which does not disappear for many years after their occupation is changed.

J. Sailors are very much given to tattooing the skin of their arms and hands. These marks are very durable.

K. Stone carvers often present deformities of the left thumb, which is often considerably turned to one side and it is not infrequently that a bunion is formed over the last joint.

L. Tailors exhibit in addition to the appearances of the fingers callosities on the shins, owing to the attitude in which they work.

M. Plasterers present callosities around the inside of the thumb and adjoining surface of the index finger from holding mortar boards.

BLOOD STAINS.

Ques. What facts relating to a stain would tend to fix its identity as a stain of blood?

Ans. Its color, viscosity, chemical reaction and microscopical appearance.

A. The color of the blood stain is red, varying in shade from bright red to brown, dark brown on white material and black on dark material.

B. The viscosity of a blood stain is due to the fibrin, which resembles the white of an egg, sticking the blood-stained material together when folded.

C. The various chemical reactions may be noted as follows:

a. The chemical tests depend upon the recognition of the red coloring matter of the blood haemoglobin.

b. It forms a quick solution with cold water and this solution is bright red, if recent.

c. If the stain is old the solution will be brown or black, the haemoglobin becoming oxidised from long exposure.

d. The red solution is not changed to a crimson or a green tint by the addition of a few drops of ammonia.

e. If the ammonia be added in large quantity or very concentrated it will change the solution to a brownish color.

f. The red solution if boiled loses its color, becomes coagulated and the coloring matter falls in a brown flakey precipitate.

g. The red solution with fresh tincture of guaiacum gives a reddish white precipitate of the resin.

h. If to this precipitate you add a few drops of ethereal solution of peroxide of hydrogen you obtain a beautiful blue color, and with the addition of alcohol the color changes to deep sapphire blue.

i. With tincture of galls the red solution gives a red precipitate.

j. A red solution of blood becomes color-

less by the addition of a few drops of sulphurous acid.

k. A solution of hydrate of soda added to the red blood solution changes the color to olive green, which changes to red on the addition of acetic acid.

l. Strong nitric acid renders the red solution of blood a dirty brown color.

m. A solution of chlorine added to the blood solution does not change its color, unless very strong.

n. By the spectroscope there appear dark absorption bands in the green, changing somewhat according as the haemoglobin be reduced or in the oxy-haemoglobin or methaemoglobin form.

Ques. What two elements are sought for in making the microscopic examination of the blood?

Ans. The haematin crystals and the blood corpuscles.

Ques. How are the haematin crystals obtained for purpose of examination?

Ans. By adding glacial acetic acid to a mixture of common salt and the dried scrapings of a blood stain. Cautiously evaporate the solution, until solidification commences. Cool the slide rapidly and examine with the one-fourth inch objective. There will be seen three kinds of crystals, haematin, hydrochlorate of haematin and sodic chloride, the first are rhomboidal, the second tabular and the third cubical in shape.

Ques. How is the specimen prepared for microscopical examination for the purpose of viewing the blood corpuscles?

Ans. If the blood is fresh, a very slight stain made by a needle dipped in the solution or liquid stain and rubbed thinly over a cover glass and laid carefully on the slide, if examined by about a five hundred diameter power will show the round disks distinctly. If the stain be old and dry, it should be moistened by glycerine or salt solution, so as to separate the corpuscles from the clot; they may then be seen as before, but smaller and corrugated around the edges. If the stain be very old the corpuscles may be all disorganized, so that they may not be found at all.

Ques. What are the questions that arise on making an examination of a stain suspected of being blood?

Ans. 1. Is this stain blood?

2. Is the blood human blood or of some other animal?

3. Was the blood shed from a living or dead body?

4. Was the blood menstrual or from the general circulation?

5. What is the probable age of the stain?

Ques. In answering the first question, what are blood stains apt to be mistaken for and what are likely to be mistaken for blood stains?

Ans. 1. Grease spots, distinguished by

their solubility in ether, benzine or chloroform.

2. Red paint, entirely insoluble in water.

3. Iron rust on steel instruments, all turn black with a solution of tannin.

4. Tar and pitch stains, soluble in alcohol and turpentine, which blood is not.

5. Madder, the color is not destroyed by heat when in solution, while that of blood is.

6. The juices of red fruits frequently become green by adding a weak solution of ammonia; blood is unchanged.

7. Cochineal, logwood, Brazil wood solutions become crimson with ammonia, blood remaining unchanged.

Ques. In answering the second question what opinions can be formed?

Ans. 1. Human blood can be distinguished from that of birds and reptiles by the shape of the corpuscles, when these can be made out in the examination. The shape in birds and cold-blooded animals is elliptical and they are nucleated. This is true also of the blood of the camel.

2. When fresh the corpuscles of human blood may in most cases be distinguished from those of other mammalia by the average size. The average diameter in man is 1-3200 of an inch, varying from 1-2000 to 1-4000, those of the dog and rabbit being nearly the same. Those of the other domestic animals being smaller.

3. It has been found that the crystals formed from the blood of the man and monkey are those of reduced haemoglobin, while those of the other mammalia are of oxyhaemoglobin, and that the spectroscope also reveals this difference. The blood of man generally forms rectangular tabulate crystals, while those of the monkey are hexagonal.

4. No opinion can be positively expressed unless the blood is fresh, and then the opinion should be guarded and fortified by the exhibition of samples of the blood of the animal which it is supposed to represent.

5. Frequently an opinion may be given that there is no appearance about the specimen inconsistent with its being human blood.

Ques. As to the third question, what opinion can be given as to whether the blood was shed from a living subject or a dead one?

Ans. When fibrin is found in the stain and the material on which the stain is present is stiffened thereby, the guarded opinion may be expressed that the blood was drawn from a living person. If the blood is found scattered over the material in numerous small spots, it was most likely shed from a living person.

Ques. What opinion can be formed as to the fourth question, whether the blood was menstrual or not?

Ans. Menstrual blood is generally lacking

in fibrin, gives even in the fresh state the haematin reaction and by aid of the microscope it is found mixed with epithelial cells of the vagina. The opinion could only be positive when the blood was fresh.

Ques. What opinion can be formed as an answer to the fifth question, about the age of a stain?

Ans. Haemoglobin is a very soluble substance while haematin is a very insoluble one and when the haemoglobin is still unchanged, the opinion can be given that the stain is fairly recent, but if it be changed, the opinion cannot be given that it is old. The condition in which the corpuscles are in will also indicate somewhat the age of the stain, for if the circular shape is retained they cannot be very old.

Ques. What different rules are to be observed in the examination of suspected stains different fabrics?

Ans. 1. Recent stains on white fabric: Cut a small piece and soak for about ten minutes in a watch glass of pure cold distilled water. Squeeze out the fluid and allow it to stand for a little time so that all insoluble matter may be precipitated. Then put the solution in different test tubes for examination.

2. If the blood stain be old, either citric acid or ammonia may be used to assist the solution.

3. If the stain be on colored material, that reagent should be used which has the least action on the dye. Glycerine and ammonia have both been used with advantage.

4. If the fabric has been washed in soap and water, the haemoglobin will all have been changed to haematin by the alkali and can then be tested by the guaiacum test.

5. If the stain is upon leather, shave off a thin slice of the leather having the stain upon it, so as to take as little leather as possible and place in a watch glass of distilled water, stained side down, and a solution may be obtained in this way.

6. When the stain is mixed with earth the suspected material is made into a solution with ammonia and then tested.

7. If the blood is supposed to be contained in urine, the same may be filtered and the filtrate tested.

8. When the suspected stain is upon a steel weapon, the same may be carefully scraped into a watch glass of distilled water and the solution tested. If the stain be produced by a fruit juice acting on the iron, the rust will be citrate of iron and gives a blue color with the ferrocyanide of potash. This latter has frequently been mistaken for blood.

IDENTITY OF CHARRED AND MANGLED REMAINS.

Ques. What questions must be taken into consideration when examining charred,

mangled or putrefying remains for the purpose of ascertaining their identity?

Ans. 1. Are the parts presented human remains or are they portions of the body of some lower animal?

2. Are the parts presented all of one body or are they portions of several different bodies?

3. By what instruments, or means, was the body dismembered?

4. What was the sex of the body?

5. What was the approximate age of the body?

6. What was the approximate size of the body?

7. Are there any bodily peculiarities or deformities present?

8. Under what circumstances were these remains discovered?

Ques. What facts are important in finding answers to the foregoing questions?

Ans. 1. Bones of turkeys have been mistaken, when charred, for those of a human infant and arrests for infanticide made.

2. The presence of duplicates among the parts presented would settle the question as to whether the parts were all of one body or not.

3. Different size or different color of skin or complexion in the parts presented would also assist in answering the same question.

4. Human bodies are frequently dissected in institutions of learning and students are very apt to leave partially dissected remains in places where they may become the subject of legal investigation, thus the manner of dismemberment may be important.

5. If the nature of the instrument used be apparent, the identity of the user may be traced, from his occupation, as in the case of a butcher or physician.

6. The sex is made out from the shape of the parts, the presence of considerable hair on the skin, the shape of the pubic hair, if present, the presence of beard on face, length of hair, presence of any of the distinctive organs of either sex.

Ques. What is the shape of the pubic hair in the male?

Ans. A triangle with the apex upward.

Ques. What is the shape of the pubic hair in the female?

Ans. A triangle with the base upward.

7. Any extended work on anatomy will show the time at which the different epiphyses unite with the shafts and bodies of the bones, so the approximate age may be determined if any number of the main bones be present. The size also will in some measure assist in answering this question.

8. Comparative tables are to be had by which the height and size of a body may be determined from the size and length of any part, in an approximate degree.

9. Congenital deformities or deformities resulting from injuries which occurred at

some time previous to death are usually good points of identification.

Ques. When only bones of a more or less complete skeleton are presented for identification, what is the procedure?

Ans. 1. The bones should be compared for size, height, age, etc.

2. The bones should be examined for sexual characteristics.

3. The teeth should be carefully described. The first and second dentition noted. All vacancies, deformities, fillings or operations on the mouth should be described and a cast of the mouth taken, if possible. It is a fact that dental surgeons usually keep a map of the mouths of people who have work done in their offices and these maps often become complete sources of identification.

TATTOO MARKS.

Ques. What are tattoo marks?

Ans. They are pictures painted on the surface of the body by means of pricking certain coloring matters into the skin.

Ques. What points are important in the examination of such marks for the purpose of establishing identity?

Ans. 1. They are very durable, lasting, usually, through life, their durability depending some what upon the efficiency of the process and the particular coloring material employed.

2. They are very common among seafaring men and the lower class of criminals.

3. They cannot be removed by mechanical means without leaving scars.

4. If the painting has been poorly done and only vermilion or anilines used, the marks may fade out after several years.

5. Those produced with india ink and gun powder are usually the most indelible, other things being equal.

6. Blue and red are the prevailing colors.

7. Their appearance may be altered by making additions to the original design.

8. The most common situations are on the flexor surfaces of the forearm and the breast.

9. They are very valuable for purposes of identity for they are persistent after death and may be preserved for many years by tanning the skin.

SCARS.

Ques. What points are of medico-legal importance in regard to scars?

Ans. 1. All wounds involving the true skin leave a scar, more or less durable, according to the severity of the wound and the amount of tissue substance lost.

2. All wounds involving loss of substance of the true skin leave a scar that persists through life, depressed and puckered according to the amount of tissue destroyed.

3. The scars left by a bullet wound, a stab wound and a scrofulous ulcer may resemble each other very closely.

4. Scars left by vaccination, leeching, wet cupping and some of the common surgical operations can usually be identified.

5. Scars left by extensive burns are very apt to contract, leaving great deformity.

6. Scar tissue may become in years very dense, but it never becomes true skin, the sebaceous follicles, sweat glands, adipose cells, hair bulbs, etc., are absent and blood vessels, nerves and absorbents are few.

7. When a scar is indistinct, pinching the skin will bring it out by causing redness in the surrounding tissue, while the scar grows whiter by comparison.

8. Scars made on children are apt to grow as the child grows.

9. Scars may be altered in appearance by cutting away tissue and making a larger one.

Ques. What points are important in estimating the age of a scar?

Ans. 1. A simple, clean cut wound, involving no loss of substance and uninfected may form a complete scar in two weeks.

2. Wounds of the lower extremities heal

slower than wounds of the same size and description of the upper extremities.

3. Wounds in the old heal less rapidly than wounds in the young.

4. Wounds in the healthy heal more rapidly than wounds in the sick and diseased.

5. The extent of a wound and the number and importance of the structures involved, influence very materially the time necessary to form a scar.

6. When the scar is soft, tender and pink in color, it is usually recent.

7. When the scar is harder, less tender, and brownish white in color, it is usually from two to four months old.

8. When the scar is hard, white, shining and glistening in appearance, it is usually over six months old and may be six years old, but the opinion can be given that it surely is not very recent.

9. The possibility of two persons having the same kind of a scar in the same location is not to be forgotten.

10. Post mortem, it may be difficult to diagnose a scar from a small area of skin that has rested on some hard substance, as both may be surrounded by post mortem lividity.

CHAPTER V.

CAUSE OF DEATH.

Question. Into what four classes may all deaths be divided for the purpose of studying their causation?

Ans. 1. Natural death from recognized disease, lasting over some days, the result being predicted by a physician in attendance.

2. Sudden and unexpected death from natural causes.

3. Death due to violent causes, the event being prolonged and complicated by intercurrent disease or bad treatment.

4. Sudden, violent death.

Ques. How are cases of natural death disposed of by the legal health authorities?

Ans. Burial permits are issued on the certificate of the attending physician as to the cause of death.

Ques. What natural causes lead to sudden and unexpected death?

Ans. Disease of the heart.

Ques. What forms of heart disease terminate suddenly?

Ans. A. Fatty and brown degeneration.

B. Angina pectoris.

C. Aortic regurgitation.

D. Interstitial abscess.

E. Rupture of the heart or its valves.

F. Disease of the pericardium.

2. Diseases and injuries of the blood vessels.

Ques. What forms of blood vessel disease are apt to prove suddenly fatal?

Ans. A. Thrombosis and embolism.

B. Aneurism and rupture of sac.

C. Puncture of the blood vessels by spiculae of bone on account of spontaneous fracture.

3. Apoplexy or rupture of a blood vessel in the brain.

4. Pulmonary apoplexy and haematothorax.

5. The sudden bursting of large internal abscesses.

6. Ulcers of stomach and duodenum.

Ques. How do ulcers of the alimentary canal kill people?

Ans. A. By hemorrhage.

B. By long continual malnutrition.

C. By stenosis from cicatricial tissue.

7. Rupture of the ovum in cases of extra uterine foetation and the consequent hemorrhage.

8. Apoplexy and haematocele of the ovary.

9. Rupture of the uterus in the latter months of pregnancy or during labor.

10. Rupture of the distended urinary bladder.

11. Cholera and other zymotic diseases often kill quite suddenly.

12. Large draughts of cold water taken suddenly may cause death from shock.

13. Rapid drinking of large quantities of

alcoholic liquors may also produce sudden death.

14. Death may be suddenly caused by accidental choking while eating; foreign bodies finding their way into the air passages.

15. Mental emotions, such as sudden fright, great grief, or excessive joy.

Ques. What questions arise in those cases where violent death is complicated by intercurrent disease or bad treatment?

Ans. The question of the responsibility of the assailant and the efficacy of the treatment used, and the whole nature of the treatment.

Ques. What is the legal rule usually applied in these cases?

Ans. When from examination it is found that death is due to the violence, no matter how badly treated or how carelessly neglected, the responsibility of the assailant is never entirely lost, but may in some degree be lessened.

When the examination reveals that the death was due to the treatment of the injury no matter how necessary or how skillfully applied or from intercurrent disease, not dependent on the injury, the responsibility is lost and the assailant cannot be held accountable.

Ques. What are the principle violent causes of death?

Ans. 1. Wounds.

2. Burning and scalding.

3. Poisoning.

4. Drowning.

5. Hanging.

6. Strangulation.

7. Smothering.

8. Suffocation.

9. Lightning and electric shock.

10. Sun stroke and heat stroke.

11. Freezing.

12. Starvation.

13. Hypnotism and other mental impressions.

Ques. In what different modes does death begin?

Ans. 1. From the head-coma.

2. From the heart-syncope.

3. From the lungs-apnoea.

Ques. What are the immediate causes that give rise to coma?

Ans. A. Compression of the brain.

B. Concussion of the brain.

C. Narcotic poisons.

D. Uremic poisoning from liver and kidney diseases.

E. Certain mineral poisons, such as barium and arsenic.

F. Anaemia of the brain from chronic depletion.

G. Thrombosis and embolism.

Ques. What varieties of syncope have we?

Ans. 1. Anaemia, a deficient quantity of

blood in the body. This condition may be local on account of a sudden relaxation of the muscular control of the blood vessels, allowing all the blood in the body to sink into the dependent parts.

2. Asthenia—Weakening of the heart muscle.

Ques. What are the immediate causes of anaemia?

Ans. A. Injuries to the heart and large vessels.

B. Hemorrhages from the lungs, uterus, or ulcers in the alimentary canal.

C. Discharges other than blood, as seen in prolonged suppuration.

Ques. What are the immediate causes which tend to produce asthenia?

Ans. A. Starvation.

B. Exhausting diseases, such as tuberculosis, cancer, diabetes.

C. Tumors pressing on the thoracic duct.

D. Stenosis of the alimentary canal.

E. Action of certain poisons.

F. Concussion of the spine.

G. Paralysis of the sympathetic system.

H. Severe brain lesions.

Ques. What varieties of apnoea have we?

Ans. 1. Stoppage in the action of the respiratory muscles.

2. Where the entrance of pure air is prevented, as well as the escape of impure air.

3. Where the supply of blood to the lungs is shut off, as in the case of plugging of the pulmonary artery by the formation of a thrombus or the lodgment of an embolus.

Ques. What causes lead to the stoppage of the respiratory muscles?

Ans. A. Exhaustion of the muscles.

B. Loss of innervation from injury to the medulla or spinal cord.

C. Mechanical pressure.

D. Tonic spasm as in tetanus or hydrophobia.

E. Diaphragmatic hernia.

F. Pneumothorax.

G. Division of the eighth pair of nerves.

Ques. What processes prevent the free exchange of air in the lungs?

Ans. The different methods of asphyxia.

A. Drowning.

B. Strangulation.

C. Hanging.

D. Smothering.

E. Suffocation.

Ques. What are the prominent symptoms of coma?

Ans. 1. Stupor.

2. Loss of sensibility.

3. Unconsciousness.

4. Irregular, stertorous breathing.

5. Congestions attendant upon apnoea, thus induced.

Ques. What are the post mortem appearances attending death by coma?

Ans. A. Cerebraleffusion.

B. Apoplectic clots.

C. Compression by cranial fractures.

D. Left side of the heart empty and right side full, but not engorged as in death by apnoea.

Ques. What are the important symptoms of syncope as it appears by anaemia?

Ans. 1. Mortal pallor or duskiness in face and lips.

2. Cold sweats.

3. Dimness of vision and dilated pupils.

4. Vertigo.

5. Slow, weak, irregular pulse, perhaps fluttering.

6. Nausea and vomiting.

7. Jactitation of the limbs and restlessness.

8. Delirium and hallucinations.

9. Hiccough.

10. Irregular, sighing, gasping respiration.

11. Insensibility, unconsciousness, and perhaps convulsions.

Ques. What are the post mortem appearances that attend death by anaemia?

Ans. A. Unnatural pallor over the entire body.

B. The heart and large blood vessels are empty and contracted.

Ques. What are the symptoms of syncope as it approaches by way of asthenia?

Ans. 1. The trunk and extremities are extremely cold.

2. The skin is livid in color, because the circulation ceases in the extremities first.

3. The pulse is frequent and weak or absent altogether.

4. The muscular weakness is extreme.

5. The mind and senses generally clear until the last.

Ques. What are the post mortem appearances peculiar to death by asthenia?

Ans. The heart cavities are full, dilated, and flabby. The heart ceases because it no longer has the power to contract and expel the blood that flows into it.

Ques. What are the symptoms of apnoea?

Ans. 1. Intense struggle for breath.

2. Lividity and swelling of the features.

3. Vertigo.

4. Rapid loss of consciousness.

5. Relaxation of sphincters.

6. General convulsions.

7. Rapid loss of muscular power.

Ques. What post mortem appearance is peculiar to death by apnoea?

Ans. There is found congestion and engorgement of the right side of the heart and of the lungs and entire venous circulation.

CHAPTER VI.

POST MORTEM EXAMINATIONS.

Question. Why are post mortem examinations necessary?

Answer. To acquire and record the information requisite for solving the foregoing questions that form the duty of a coroner's inquest.

Ques. What favorable circumstances and requirements should we endeavor to secure in order to make a successful and accurate post mortem examination?

Ans. 1. A room well lighted by daylight.

2. An intelligent and disinterested assistant to record the result of the examination as it progresses.

3. A strong table about six feet long by two feet wide.

4. The absence of every other person save an expert appointed by the court to represent the other side of the case from that on the part of whom you are employed.

Ques. What instruments and appliances should be taken along when summoned to perform a legal post mortem?

Ans. 1. Photographic apparatus.

2. Tape line, measuring cone, for obtaining diameter of openings. Pint glass graduate for measuring quantity of fluids, bougies, both large and small, and scales for weighing.

3. Half a dozen chemically clean glass jars and about the same number of wide mouth glass stoppered bottles, with sealing wax and seal, for preserving various portions of the body for more extended examination.

4. Magnifying lens and slides and cover glasses for preserving specimens of fluids, etc., for microscopic examination.

5. Paper, pens and ink for recording the process of the examination.

6. Needles, stout thread, sticking plaster, and a large roll of absorbent cotton for the purpose of restoring the body to its natural appearance after the examination.

7. Three large clean plates, three large clean sponges, one empty bucket, and one bucket filled with clean water, half a dozen clean towels.

8. One sharp, strong, short bladed knife, one long, sharp, thin bladed knife, several small dissecting knives, blunt and sharp pointed scissors, dissecting forceps, bone saw, bone forceps, hook, hammer and chisel.

Ques. What are the different steps followed in making the examination?

Ans. 1. Everything must be accurately described, especially all abnormalities, and all transient abnormalities should be photographed.

2. Record sex, size, apparent age, color, race, nationality, color and length of hair,

baldness, color of eyes, shape of beard, and all prominent marks of identity.

3. External condition of the body, warm or cold, naked or clad, pale or livid, rigid or flacid; state to which putrefaction has advanced.

4. Location and position of the body, relation to and distance from articles of furniture, windows, doors, etc. If the body has been moved, ascertain its original position.

5. Condition of clothing, order or disorder, clean or stained, blood or vomited matters, paint, rust, dirt, state of wear, kind of material, buttons, and other marks of identity.

6. Condition of room, order or disorder; carpets, walls, furniture, blood stains, foot or hand-prints, vomited matters, articles of food or bottles of medicine or poison.

7. Examination of naked body, well nourished or emaciated; effects of disease, remote or recent; marks of violence, wounds, scars, tattoo marks, deformities, congenital or acquired; callosities of occupation, other marks of identity.

8. Examination of natural orifices of the body, mouth, fauces, nose, vagina, urethra, anus, ears, for marks of violence, foreign bodies or signs of disease; under this head describe the condition of the teeth.

9. Internal examination of the body, properly called the autopsy.

A. Make an incision from the cricoid cartilage to the os pubes, cut back the chest muscles, exposing the cartilages of the ribs at their junction with the bones, disarticulate the sternal joint of the clavicle, raise and turn aside the front wall of the thorax, taking care not to wound the great vessels at the root of the neck.

B. Open the pericardium and note adhesions, quantity and nature of fluid, position and size of the heart. Open each auricle and ventricle separately and note clots, engorgement or rupture of walls.

C. Open the plura, if not already opened in raising the chest wall, note adhesions, quantity and nature of fluid, size and position of lungs, whether inflated, congested, contracted, or in a state of atelectasis.

D. Open the abdominal cavity, note position of diaphragm, liver, spleen, stomach, intestines, uterus, bladder, adhesions, quantity and nature of fluid, color of organs, distention, presence of foreign growths, effect of disease, either remote or recent; marks of violence.

E. Make an incision from ear to ear, over the top of the head, reflect the scalp over the frontal and occipital bones, exposing the calvarium. Note any fractures, depressions or subcutaneous effusions of blood.

F. Make a circular line around the head, one inch above the ears, orbits and external occipital protuberance. Saw through the skull on this line, except two inches on each side, just above the ears. Mark a line two inches long on each side, about a half inch

below the above-mentioned line and parallel with it, corresponding to the spaces left unsawn. Saw through on these lines and split the calvarium off with a chisel, thus leaving two tennants on the calvarium and two corresponding mortises on the skull below, thus rendering the firm replacement of the calvarium possible after the examination is finished. Examine the calvarium for fractures of the inner plate and effusions of blood between the skull and dura mater.

G. With the blunt pointed scissors, slit through the dura mater on a line with the edge of the skull and remove it. Note the presence of clots, lymph, serum, effusion, or congestion of the vessels between the dura mater and the arachnoid.

H. Gently raise the brain at the frontal lobes and with a small knife sever the cranial nerves, falx cerebri and cerebelli, meningeal arteries and jugular veins, until the medulla oblongata is reached, then thrust the knife down and sever the spinal cord and vertebral arteries as low as possible and lift the brain out and place it on a clean plate for further inspection. Examine the base of the skull for fractures, punctures, clots or other marks of violence.

I. Remove the lungs with the trachea and larynx, by cutting their attachments. Note color, size, weight, engorgement, and consistence. Make an incision through the substance of the lung from end to end. Note pus, mucus, bloody froth, false membrane, abscess cavities, solid infarctions, Tardieu's spots, congestive redness, or foreign bodies in larynx, trachea or bronchi.

J. Remove the heart by cutting through the large vessels at the base. Examine the valves for insufficiency or vegetations, measure the size of the openings for stenosis. Note the condition of the coronary arteries for thrombosis or embolism. Note the thickness of the muscular walls for hypertrophy or dilatation or rupture. Examine the large vessels near the heart for aneurism, thrombosis, or calcareous degeneration.

K. Tie the stomach off at both the cardiac and pyloric orifices, cut between the ligatures, remove and place in jar for further inspection.

L. Remove the large and small intestines in the same manner as the stomach. Note the condition of the appendix vermiformis, place these also in a jar for further inspection, by themselves.

M. Remove the spleen and liver by cutting through their attachments. Note color, size and weight of each. Cut deep incisions from end to end, through their substance and note color, abscess cavities, solid infarctions, or the effects of disease. The size of the gall bladder should be noted, its contents measured and kept for chemical analysis. Bougies should be passed through the bile ducts to ascertain if they are pervious.

N. Remove the kidneys by cutting through their attachments. Note their col-

or, size, weight, adherence of capsule, condition of supra-renal bodies, enlargement of the pelvis of the kidney. Cut through the substance, laying it in half. Note cavities, congestion, pus, or calculi. Pass small bougies down the ureters to ascertain if they are free.

O. Remove the pelvic organs, examine the bladder, preserving it and its contents in a separate jar for chemical analysis. Note the thickness of its walls, presence of foreign bodies, calculi, and other effects of disease. Note the size of the prostate if it be a male, and pass a bougie through the urethra to ascertain if the passage be free. Examine the uterus and vagina if it be a female, for marks of violence, signs of virginity, pregnancy, or recent delivery. Note the size of the womb, its weight, and the color of its lining membrane. Examine the ovaries for degeneration, apoplectic clots, and corpora lutea. The fallopian tubes should be examined for rupture, abscess, plugging, etc.

P. Make an incision down the back from the occiput to the sacrum. Expose the vertebral column and saw each side the spines of the vertebrae, lift out the section, exposing the spinal cord. Note effusions of blood, clots, fractures of the vertebrae, contusions, lymph and serous effusions. Cut the spinal nerves close to the bone and remove the cord and place it in a jar for further examination by the microscope.

Q. Examine the brain for adhesions or thickening of its membranes subcranial tumors, marks of violence, foreign bodies, etc. Note the convolutions and sulci and see if they are normal in position and prominence. Make sections about one-quarter of an inch thick, horizontally, and note consistence, color and condition of both white and gray matter, puncta cruenta, solid infarctions or softening, quantity of fluid in the ventricles, presence of lymph or false membranes, apoplectic clots or engorgement of cerebral vessels.

R. Slit open the stomach and intestines and empty their contents into their respective jars and spread their tissue out on the table, mucous side up, and note redness, erosions, ulcers, thickening of walls, foreign bodies or perforations, and restore to jars.

S. Slit open the oesophagus and examine for erosions, foreign bodies, ulcers, stenosis or diverticuli.

T. Slit open the thoracic duct and examine for stenosis or diverticuli.

U. Carefully dissect out any penetrating wound, whether it be gun-shot or stab, trace its course, give the structures involved, describe its nature, size, direction, location, signs of healing, etc.

10. Sponge out the cavities of the body and restore the solid organs, after preserving sections for microscopic examination. Pack full of absorbent cotton, draw back the skin of all incisions and sew them up carefully, over and over. Cover the sutures with sticking plaster where exposed by clothing, wash the body clean, remove every trace of the examination from the room. Dress the body if clothing be provided and compose the features so that the friends will not be able to see that the body has been mutilated.

11. Carefully seal the jars with your own seal, label with name of deceased on whom the examination was held, date and contents. The jars should contain the following:

- A. The stomach and contents.
- B. The intestines and contents.
- C. The gall bladder and contents.
- D. The urinary bladder and contents.
- E. The uterus, ovaries, and tubes.

The bottles should contain samples of the fluids found in the brain, pericardium, plura, peritoneum, and also blood.

There should be kept sections for microscopic examination of the brain, spinal cord, liver, spleen, kidneys, lungs and ovaries or testicles.

12. These jars and specimens should be kept in a room, the doors and windows of which are kept carefully sealed until the examination is completed or the specimens turned over to other experts for examination.

13. The record of the examination should be carefully made at the time so that it will need no revising afterwards. It should be read over and signed by the party making the examination, his assistant, and such other expert as may be present, at the order of the court.

Ques. What compensation may an expert charge for making a post mortem examination?

Ans. In some states the fee is fixed, so far as the part of the prosecution is concerned. About twenty-five dollars is the amount usually allowed. This is increased where chemical examinations or rigid microscopic examinations are made by the same expert.

The expert is not obliged to make the examination and may charge his own fee, or arrange for it to be paid in advance; but if the examination be already made, without making such an arrangement, the expert can be compelled to give his testimony as to the results of the examination, as such information comes within the duty of a common witness, and he will have to content himself with the same compensation allowed other witnesses.

CHAPTER VII.

WOUNDS.

Question. What is a wound?

Answer. A solution of continuity in the tissues of the body, suddenly produced by mechanical violence.

Ques. Why do we make a medico-legal examination of a wound?

Ans. 1. To ascertain if it be homicidal, or accidental.

2. To ascertain its prognosis, fatality or severity.

3. To ascertain its age, whether it be recent or old.

4. To ascertain whether it was produced before or after death.

Ques. How are wounds described?

Ans. 1. Their nature.

2. The sort of instrument which produced them.

3. Their number, single or multiple.

4. Location, accessible or inaccessible to the victim.

5. Size, extensive or trivial.

6. Direction, straight or oblique.

7. Gaping.

8. Hemorrhage, profuse or scanty, arterial, venous or capillary.

9. Lymph, pus, granulations, red healing line, scar tissue.

10. State of edges, rough and irregular or smooth and even.

11. Important tissues involved, blood vessels, nerves, muscles, etc.

Ques. How are wounds classified as regards their nature and the sort of instrument that produced them?

Ans. I. Incised or clean cut wounds, produced by sharp cutting instruments, usually with a single cutting edge, for example, a razor, pocketknife, hatchet, axe, scythe, surgeon's catlin, butcher and carving knives, etc.

2. Punctured or stab wounds, produced by sharp pointed instruments, sometimes round, but usually having a double cutting edge, such as a dirk, bowie, stiletto, dagger, poniard, thrusting sword, bayonet, spear, arrow, etc.

3. Contused or bruised wounds, produced by smooth, blunt instruments of the club variety, for example, slungshot, sandbag, smooth stone, policeman's billy, heavy fall on even surfaces, blows on the fist and grips with the thumb and fingers.

4. Lacerated or torn wounds, produced by rough and irregular instruments of the club variety, for example, rough stones, broken bottles, clubbed gun, heavy fall on uneven surfaces.

5. Gunshot wounds. These may be produced with ball or small shot. Their name denotes the instrument, which may be pistol, revolver, rifle or shotgun.

6. Poisoned wounds. These may be of any variety mentioned, altered by infection, such as erysipelas, tetanus, pyaemia, anthrax, or dog bites, cat bites, snake bites, glanders and farcy.

Ques. Why is the number of wounds important?

Ans. 1. A suicide would not be likely to inflict more than one rapidly fatal wound upon himself.

2. A large number of slight wounds on the front part of the body, arranged symmetrically and of the incised variety, are generally imputed, that is, self inflicted, for the sake of notoriety or other foolish purpose and imputed to some one else.

3. A large number of wounds of any variety may prove fatal from shock, or in the case of contused wounds, by subcutaneous hemorrhage.

4. A large number of contused wounds on the hands, wrists or face, especially if the clothing be disordered, are indicative of a struggle.

Ques. Why is the location of a wound important?

Ans. 1. Homicidal wounds are frequently in locations inaccessible to the suicide without complicated machinery.

2. Suicidal wounds are generally found in localities, calculated to produce death as surely, quickly and painlessly as possible.

3. A fatal wound may have been self inflicted in the attempt to perform some other operation, such as abortion, catheterisation, or in sword swallowing.

4. Accidental wounds are generally in exposed places on the body.

5. Incised wounds of a suicidal nature are generally about the throat.

6. Suicidal wounds of a penetrating nature are generally on the left side of the chest, the heart being the organ sought.

7. Insane people and the ignorant frequently carve themselves up with incised wounds in a very barbarous manner, not being very particular as to locality.

8. Homicidal stab wounds are usually in the back or side, if the victim is unconscious of the presence of the assassin, and in the chest or abdomen, if the stabbing occurred in a fight.

9. Homicidal, contused and lacerated wounds are usually on the head and shoulders, if produced with a weapon, but kicks and fist blows may be found on the abdomen, sides, limbs and face.

10. Contused wounds over the face, wrists, chest, abdomen, thighs and genitals of a female, may indicate rape or a struggle in the attempt to commit rape.

11. Contused wounds on the throat may indicate strangling or garroting.

12. Gunshot wounds of a homicidal nature are promiscuous as to locality, though the head is generally aimed for or the heart.

13. Gunshot wounds of a suicidal nature generally aim for the temple or the heart. Occasionally the pistol is fired into the mouth. They seldom desire to mutilate their own bodies and almost never shoot in the face or limbs.

14. Gunshot wounds of an accidental nature are usually in the front part of the body or on the sides. The circumstances under which they were received are generally apparent.

15. Poisoned wounds are not confined to any particular locality, but it would be natural to look for the bites of animals about the lower limbs or the hands. A dog will occasionally jump for the throat. Tetanus attacks wounds of the hands and feet by preference and erysipelas wounds of the face. Pyaemia is most frequently seen in wounds that penetrate the chest, abdomen, or pelvis.

Ques. Why is the size of a wound important?

Ans. 1. Extremely large wounds approaching to dismemberment of the body are nearly always homicidal.

2. Insane people sometimes erect very complicated machinery for the purpose of suicide, and thus succeed in producing very large wounds.

3. Large wounds of an accidental nature generally attend closely the circumstances by which they were inflicted.

4. The slightest wounds may prove fatal from infection or in persons peculiarly liable to injury from violence.

Ques. What circumstances would be likely to render a person particularly susceptible to a wound?

Ans. A. Abnormally thin skull.

B. Aneurism of the large vessels.

C. Heart disease of the valvular variety.

D. Pregnancy in the female.

E. Enfeeblement by disease.

F. Extreme old age, or infancy.

G. Hemorrhagic diathesis.

Ques. How is the direction of a wound determined?

Ans. 1. The direction of an incised wound is determined by the non-coaptibility and non-conformity of the wound in the deep structures, with the cut in the skin. The cut in the deep structures extending further in the direction of the wound than the cut in the integument. This is due to the stretching of the skin under the force of the blow.

2. The direction of a stab wound is determined in the following manner. If the wound be direct the skin wound will be directly over the wound in the deep structures. If the wound be oblique, the shape of it will be triangular and the apex of the tri-

angle will point in the opposite direction to that of the wound, owing also to the stretching of the skin under the knife point.

3. The direction of a gunshot wound can only be determined from its location and the examination of the deep structures, remembering that when a ball strikes any hard substance it becomes deflected in its course, the angle of incidence being supposed to equal the angle of reflection.

4. The direction of contused and lacerated wounds can only be determined from their location.

Ques. Why is the direction of a wound important?

Ans. 1. Homicidal wounds of the incised variety, in the throat, are generally from left to right and from below upwards, the assassin standing behind the victim.

2. The suicidal throat wound of the incised variety is from right to left and from below upwards, the razor being held bent over back and in the right hand.

3. The suicidal stab wound is either from above downwards or more or less direct.

4. The homicidal stab wound is from above downwards, in the back, but may be direct if the patient be lying down and the wound located in the chest. If the wound be made in a struggle, it is liable to be made in any direction, usually oblique from above downwards, or from below upwards.

5. Accidental stab wounds are irregular in direction, if caused by the body falling upon the penetrating instrument, but may be from below upwards and on the front part of the body. If they were caused by the penetrating instrument falling upon the body, the wound will be, in direction, from above downwards, and most likely on the head, back or shoulders.

6. Gunshot wounds are seldom suicidal if in the back or sides, on a line parallel with the floor.

Ques. Of what importance is the gapping of a wound?

Ans. All wounds made during life gape, those made after death do not gape. This is owing to the elastic tissue in the skin, which in a state of vitality contracts.

Ques. Why is it important to note the hemorrhage from a wound?

Ans. 1. All wounds made during life bleed more or less. If the wound is deep, the hemorrhage is likely to be both arterial and venous. If the wound is shallow, the hemorrhage is chiefly capillary.

2. Wounds made after death on the part of the body lying uppermost, never bleed. Wounds in dependent parts ooze from the severed vessels a thin, watery, sanguinolent fluid, but there is no real hemorrhage unless a very large vessel is cut, at a very short time after death, before the blood has time to coagulate.

3. Arterial hemorrhage takes place by spurts and jets, with each heart beat, and

the hemorrhage falling upon the floor will be apt to show a large number of small specks or sprinkles.

4. Venous blood is shed in a steady stream or flows in drops, small jets are not observed.

5. In hematomphilia large quantities of blood may flow from a very slight, trivial wound, even sufficient to cause death. This has frequently happened from extracting a tooth, or even from simple nose bleed. There seems to be a want of contractile tissue in the walls of the blood vessels, or a want of coagulability in the blood itself, that produces it.

Ques. What can be learned from the location of the blood after a hemorrhage, as to the position the body was in when the wound was received?

Ans. A. When the blood has run down the clothes into the shoes, the victim was most likely standing when the blow was received. The blood yielding to the force of gravity.

B. When the wound is in the chest and the blood has flowed down around under the arms to the back and shoulders, the person was most likely lying asleep when stabbed.

Ques. Why is this important?

Ans. a. If the victim was standing the inference might be that there had been some provocation and that the man had warning that he was about to be attacked and thus an opportunity to defend himself.

b. If the victim be lying asleep at the time he was stabbed, there is sure proof of premeditation on the part of the assassin.

Ques. What amount of hemorrhage is likely to prove fatal.

Ans. A. Rapid hemorrhage is more apt to prove fatal than the same quantity of blood shed slowly.

B. The amount of hemorrhage is proportionate to the size and importance of the vessels severed.

C. The weight of the blood is said to be about one-sixth the weight of the body, or in a man weighing about one hundred and fifty pounds, there would be about twenty-five pounds of blood. If a quarter of this amount be lost the result is likely to be fatal, i. e., about six pounds.

D. The quantity of blood in circulation is of much more importance, as far as immediate fatality is concerned, than the quality, so if the place of the blood lost be filled by imbibitions or transfusion injections of salt solution, the heart will continue beating, and if opportunity be allowed, the quality of the blood will in due time be restored.

Ques. Of what importance are lymph. pus, red healing line, granulations, and scar tissue?

Ans. From these facts are determined the age of the wound, and when these signs are present in a wound, on a dead body, you are

not only certain that the wound was made before death, but some time previous. That the wound is old will be shown by the presence of cicatricial tissue and the age of the scar will give some information as to the comparative age of the wound.

Ques. Of what importance is the state of the edges of a wound?

Ans. 1. They will give some information as to the condition in which the instrument was, as regards sharpness and cleanliness.

2. They will help to diagnose between a wound made by a sharp cutting instrument and a smooth blunt instrument, striking obliquely over a bony surface.

Ques. Of what importance are the structures involved?

Ans. These facts have a direct bearing on the fatality of a wound and its prognosis. The length of time a person would be likely to survive it and the proper treatment to apply.

Ques. How do wounds prove fatal?

Ans. 1. By hemorrhage indirectly, through acute anaemia.

2. By hemorrhage indirectly through interference with the function of the part in which the hemorrhage occurs.

3. By the wound itself interfering with the function of the part in which it occurs.

4. By prolonged suppuration.

5. By infection and subsequent disease.

6. By contraction of scar tissue after healing.

7. By shock on account of the magnitude of the injury or the great importance in the animal economy of the part wounded.

Ques. What is shock?

Ans. A sudden profuse expenditure of vital force, owing to some profound impression made on the body, either by direct physical violence, or psychologically through the medium of the mind.

Ques. How are wounds classified as regards their prognosis?

Ans. Wounds dangerous to life and wounds not immediately dangerous to life. This classification reserves the fact that any wound may prove fatal, if infected or proper attention is not received.

Ques. Why is this prognosis essential?

Ans. If the wound is trivial, the assailant is admitted to bail, but if the wound is likely to prove fatal, bail is not allowed, for murder is not a bailable offense.

Ques. What wounds are immediately dangerous to life?

Ans. 1. Wounds involving the substance of the heart.

2. Wounds involving the large blood vessels.

3. Depressed fractures of the skull.

4. Linea fractures of the base of the skull.

5. Wounds involving the spinal canal.

6. Penetrating wounds of the chest.

7. Penetrating wounds of the abdomen.
8. Wounds of the internal organs.
9. Extensive wounds of the genitals.
10. Wounds involving the loss of a limb.
11. Contused wounds of the abdomen in a pregnant woman.

12. Wounds which left to themselves without treatment would soon prove fatal.

Ques. What circumstances effect the prognosis of an ordinary wound?

Ans. 1. The physical condition of the person.

2. The age of the person.

3. The climate, weather and diet.

4. Temperate habits.

5. Care and rest.

6. Proper surgical treatment.

Ques. How is the responsibility of the assailant to be kept intact when a surgical operation is necessary for the proper cure of a wound?

Ans. 1. The absolute necessity of the surgical operation to the cure must be apparent.

2. Every surgical operation, obtainable under the circumstances, should be employed.

3. The operation must be performed secundum artem and no new experiment attempted.

4. These operations should never be resorted to without consultation and the approval of several physicians.

CHAPTER VIII.

WOUNDS OF PARTICULAR PARTS OF THE BODY.

WOUNDS OF THE HEAD.

Question. How may wounds of the head be classified?

Answer. 1. Wounds of the scalp.

2. Wounds of the face.

3. Wounds of the organs of special sense—eye, ear nose, etc.

4. Wounds causing concussion of the brain.

5. Wounds causing fracture of the skull.

6. Wounds of the substance of the brain.

7. Wounds causing rupture of blood vessels and consequent extravasation of blood upon the surface of, or into the substance of, the brain.

Ques. What importance may be attached to wounds of the scalp?

Ans. 1. Clean cut wounds, if not extensive, are not serious.

2. Contused and lacerated wounds are prone to erysipelas, which may extend to the brain and its membranes.

3. Scalp abscesses are very difficult to drain properly, so that the pus is apt to burrow.

Ques. What importance may be attached to wounds of the face?

Ans. 1. The pain and shock are severe.

2. The subsequent inflammation is apt to be destructive.

3. Close proximity to the brain renders the implication of that organ imminent.

4. The function of the organ wounded may be destroyed, especially is this true of the eye and ear.

Ques. How does concussion of the brain cause death?

Ans. The sudden and violent jar paralyzes and suspends the functions of the ganglyonic cells and kills a large number of them, if the violence be great.

Ques. What points are important in regard to concussion of the brain?

Ans. 1. Death may be sudden and instan-

taneous, following the blow, with no symptoms attending, nor post mortem appearances, save those of death by coma.

2. The person on receiving the blow may fall down unconscious and insensible, with stertorous breathing and all the signs of coma.

3. The same violence that produces concussion may give rise to meningitis, cerebritis, or apoplexy, with all the usual symptoms and post mortem appearances.

4. Concussion and compression of the brain may coexist and usually do, if the violence has been great.

5. If it be possible to arouse, partially, a person suffering from concussion of the brain, there will be exhibited great irritability and apathy.

6. There can be no certain immediate diagnosis made between concussion of the brain and alcoholism, if the person has been drinking previous to receiving the blow.

7. A person, receiving blows upon the head, may recover from the first symptoms, induced by the blow, and subsequently die from more chronic brain disease, resulting from the injury.

8. The force of the blow may be direct or it may be communicated through the vertebral column to the brain, from a fall on the knees, feet, or buttocks.

9. There is no fact more worthy of note than the great necessity of prolonged rest in bed, after grave injuries of a concussion nature. The sleep that so frequently follows is salutary and should not be disturbed except for nourishment.

Ques. What are the important points in connection with fracture of the skull?

Ans. 1. Fractures are dangerous on account of their situation, extent, and amount of depression.

2. Fractures of the base of the skull are more dangerous, because the hemorrhage and depression that may be connected with

them are in close proximity to the centers of life.

3. There may be a fracture of either the internal or external plate of the skull, without a corresponding fracture of the other plate, so that death may result from fracture and depression and no sign of fracture appear externally. In such a case the diagnosis of pressure must be made out from other symptoms and treatment be applied accordingly.

4. Fractures may be occasioned by counter-coup and thus appear on the opposite side of the skull from the seat of injury; and in this way, blows on the top of the head may cause fracture of the base of the skull.

5. Simple fissure of the skull or separation of the natural sutures, may cause death from slow effusion of blood and eventual compression.

6. Bleeding from the ear after receiving a violent blow on the head, points very suspiciously to a fracture of the base of the skull.

7. The prognosis of a fracture of the skull is greatly improved by the possibility of appropriate treatment, raising the depressed fragments, arresting hemorrhage, and thorough disinfection of the wound.

8. In all depressed fractures of the skull the bone should be trephined and the depressed fragments raised, even though no symptoms of compression be present, lest subsequent brain trouble be set up.

9. In case of prolonged insensibility following a blow, the skull should be trephined on both sides if necessary, for exploratory purposes, as depression of the internal plate is probable.

Ques. What are the important points in connection with wounds of the substance of the brain?

Ans. 1. Wounds of the substance of the brain are not necessarily fatal, though they generally prove so, from infection and abscess.

2. The symptoms of a wound in the substance of the cerebrum will depend greatly upon its extent and locality.

3. Wounds in the substance of the cerebrum may give rise to no symptoms at all, and yet inflammation and suppuration be going on and death result suddenly.

4. Foreign bodies may penetrate and remain imbedded in the substance of the cerebrum for long periods of time without giving rise to any disturbance.

5. Wounds of the cerebellum and medulla are always fatal.

6. Wounds of the substance of the brain may prove fatal from the compression induced by the hemorrhage.

Ques. What is apoplexy?

Ans. Rupture of a blood vessel in the brain, due either to violence or disease of the coats of the vessels or both.

Ques. When due to disease, where is the rupture usually situated?

Ans. Deep in the substance of the brain or into the ventricles.

Ques. When due to violence, where is the rupture usually located?

Ans. On the surface of the brain and near the dura mater.

Ques. What sort of disease fits the blood vessels for apoplexy?

Ans. Syphilis and the calcareous degeneration of old age are most prominent, but gout and rheumatism may also render the walls of the vessels brittle.

Ques. What symptoms attend these ruptures?

Ans. Hemiplegic paralysis, both of motion and sensation, loss or impairment of the special senses, disturbance of the functions of respiration and circulation, unconsciousness and death.

Ques. How are these symptoms varied?

Ans. According to the location and amount of the hemorrhage.

WOUNDS OF THE SPINE.

Ques. What are the important points in connection with wounds of the spine?

Ans. 1. Wounds of the spine are dangerous in proportion to the injury done to the spinal marrow.

2. This injury may be in the shape of concussion, compression, or irritation, as the blow may produce jar, fracture or dislocation.

3. Injury to the spinal cord in any locality paralyzes everything below it.

4. It is possible that a direct blow may be inflicted on a vertebra, which may luxate it sufficiently to completely disorganize the marrow and the vertebra spring back into its place, leaving no external appearance of the injury.

5. Recovery from the first symptoms of a blow may take place and death subsequently result from meningitis, myelitis, or sclerosis set up by the injury.

6. Fractures may take place without any disturbance of the lumen of the canal, a dislocation could not so take place.

7. Familiarity with the signs and symptoms of concussion of the spine is very important on account of the large number of suits that grow out of railroad accidents, where such injury is alleged.

8. Fractures of the vertebra may occur spontaneously on account of caries of the bone and give rise to all the symptoms of compression.

9. Fractures and dislocations of the spine generally result from direct violence, such as kicks, blows, falls in rough places, and gun-shot wounds.

10. Sudden death may occur from fractures and partial dislocations of the spine months after the injury took place, from some peculiar movement of the body.

11. Attempts at reduction may prove fatal quicker than the injury itself.

12. Fracture or dislocation of the odontoid is the result aimed at in judicial executions by hanging, the consequent pressure on the medulla being expected to cause instant death.

13. A few recoveries are reported after partial dislocation of the odontoid.

14. The higher up the injury to the spine, the more urgent the symptoms.

15. In injuries to the spine, the parts below the injury, if not completely paralyzed, are greatly reduced in vitality, so that bed sores become extremely troublesome.

WOUNDS OF THE NECK.

Ques. What are the important points in connection with wounds of the neck?

Ans. 1. Incised wounds of any depth may involve—

- A. The trachea.
- B. The œsophagus.
- C. The carotid arteries.
- D. The jugular veins.
- E. The pneumogastric nerves.
- F. The sympathetic nerves.
- G. The spinal marrow, if very deep.

2. Hemorrhage from a severed carotid artery or jugular vein is rapidly fatal, generally before surgical attendance can be procured.

3. Severing the pneumogastric nerve impairs the function of the heart and lungs.

4. Incised wounds of the trachea cause death in two ways—

- A. By hemorrhage entering and occluding the tube.
- B. By the severed end of the tube becoming impacted in the muscles of the neck and thus occluded.

5. Contused wounds causing fracture of the thyroid and cricoid cartilage or any of the rings of the trachea are apt to prove fatal from oedema of the glottis.

6. Incised wounds, severing or severely implicating the œsophagus, cause death by starvation. The function of the organ is impaired either immediately or through stenosis, caused by the contraction of cicatricial tissue.

7. Suppurating wounds of the neck, not involving vital organs, become important on account of the great tendency of the pus to burrow.

8. On account of the protected position of the neck, it is not likely to be the seat of accidental violence, wounds upon it are usually homicidal or suicidal.

9. The contused wounds left by the processes of strangulation and hanging will be studied under those heads.

WOUNDS OF THE CHEST.

Ques. What are the important points in connection with wounds of the chest?

Ans. 1. The instrument by which the wound is made may penetrate the skin and

striking a rib become deflected from its course and not penetrate the chest cavity.

2. The wound may penetrate the chest wall, entering the pleural cavity, yet implicate no thoracic organ.

3. The wound may penetrate the chest and implicate the pericardium, the heart, the lungs, the great vessels, or the diaphragm.

4. Wounds involving the pericardium or heart muscle are not necessarily fatal, but usually prove so in a short time on account of impaired function of the heart.

5. Wounds of the lungs may cause death from traumatic pneumonia, from hemorrhage, or septicæmia.

6. The hemorrhage flowing into the pleural cavity after a wound of the chest may prove fatal by apnoea or by anaemia.

7. Wounds of the great vessels in the chest are rapidly fatal from hemorrhage.

8. Wounds of the diaphragm are dangerous on account of impeded respiration and hernia of the abdominal organs.

9. Wounds of the chest may prove fatal through pneumato-thorax. The external air compressing the lung.

WOUNDS OF THE ABDOMEN.

Ques. What are the important points relating to wounds of the abdomen?

Ans. 1. Wounds of the abdomen may involve—

- A. The skin and subcutaneous cellular tissue.
- B. The muscular wall and peritoneum.
- C. The abdominal viscera.

2. Contused wounds of the abdomen may be sufficiently severe to rupture the internal organs and yet leave no trace on the skin.

3. Abdominal wounds may prove fatal—

- A. From shock to the solar plexus of nerves.
- B. From hemorrhage and syncope.
- C. From septic infection and peritonitis.
- D. From occlusion of the intestine by hernia, invagination, or contraction of cicatricial tissue in a scar.

4. Blows over the abdomen are particularly dangerous to pregnant women.

5. It is a frequent custom for Chinese murderers to kill their victims by stabbing them in the abdomen.

6. The insane often commit suicide by inflicting upon themselves grievous abdominal wounds.

7. There are several cases on record where women have performed auto-Cæsarian section.

8. Penetrating wounds of the abdomen through the vagina are often produced in attempts to produce abortion either suicidal or homicidal.

9. Wounds penetrating the peritoneal cavity should be treated with all the aseptic precautions necessary for abdominal sections surgically made. The abdominal cavi-

ty should be opened and all the blood and foreign matter sponged out and the cavity closed with proper drainage, and all injuries of the internal organs treated specially as the case may demand.

10. In cases of rupture of the internal organs, the patient may die from internal hemorrhage and no blood show exteriorly.

11. Extensive wounds of the genital organs are apt to communicate with and implicate the abdominal cavity, either by septic infection or by inflammation.

12. In all painful wounds of the abdominal organs, aside from as complete disinfection as possible, opium is needed to assist in securing physiological rest to the parts implicated.

WOUNDS NECESSITATING THE LOSS OF A LIMB.

Ques. What points are of interest in connection with wounds involving the loss of a limb?

Ans. 1. Such wounds are dangerous to life, other things being equal, in proportion to the nearness to the body of the site of amputation.

2. These wounds are most frequent in connection with railroad accidents and often become the subject of litigation on this account.

3. In cases where the limb is ground off by a car wheel or badly crushed, the violence is so great as to utterly destroy the vitality of the soft parts at a considerable distance above the seat of the injury. This fact must be taken into account before making an amputation in such a case.

4. In making amputations in children, allowance must be made for a great tendency in the flap to contract, lest on healing the bone should penetrate the stump.

5. In cases of compound comminuted fracture the necessity for amputation is governed considerably by the condition of the arteries; whether good nourishment may be secured.

6. The necessity for amputation in case of tetanus may be disputed in the courts and a charge of malpractice brought. The question may also arise in damage suits against corporations for the loss of a limb.

7. The necessity for operation in cases of gangrene may not be immediate and in most cases the surgeon may delay until the line of demarcation has formed.

8. Where the injury to both legs or arms is great and it is of the greatest importance to save some part of a limb if possible, the injured tissues may be placed in a hot bath for the purpose of keeping up the vitality as much as possible, and with all care towards asepsis, wait for thirty-six or forty hours to see if any life will return in the injured tissue. The attempt should be first to preserve function, afterwards form. If the limb is going to prove useless it might as well be amputated.

GUN SHOT WOUNDS.

Ques. What are the most important points relative to gun-shot wounds?

Ans. 1. The wound may be produced with ball, small shot, or with powder and wadding only.

2. The appearance of a bullet wound varies with the distance and size of the ball.

3. With small shot the wound is single if fired at a short distance, but multiple if from a considerable distance. The width of the scattering here is in proportion to the distance and amount of wadding that confined the shot. The quality and amount of powder may also have some effect.

4. Wounds fired within ten feet of the body are generally more or less powder burned, in proportion to the distance and amount of powder in the charge. The grains of powder that penetrate the skin are grains that have not been burned, becoming embedded before ignition could take place.

5. The large majority of suicidal gun-shot wounds are more or less powder burned.

6. The wound of entrance shows loss of substance, the skin being punched out and destroyed. It is black and ecchemosed, containing most likely fibers of clothing, if the bullet passed through clothing in reaching the body. A wound produced by small shot is almost sure to carry with it more or less clothing fibers, if passing through clothing at all.

7. The wound of entrance heals by supuration and granulation.

8. In making the wound of exit, the ball may burst through the skin, leaving a radiated star shaped cut, with no loss of substance and which heals readily, by first intention, if uninfected. Frequently the ball shows itself under the skin and has to be removed by a cutting operation, it having spent its force before penetrating the skin a second time, the skin offering more resistance than the deeper tissues.

9. The wound of exit is not blackened or powder burned.

10. In treating bullet wounds, they should be as completely disinfected as possible, even if the wounds have to be enlarged with the knife for the purpose of effecting this. After such disinfection they should be treated aseptically.

11. The course of a ball through the tissues cannot be accurately determined and when buried in the flesh cannot be easily found except with a Roentgen Ray apparatus. This machine has, however, made such discovery possible. The truth is that a bullet may be easily deflected by the resistance met, in every conceivable direction. The swifter the speed and the greater the momentum gained the more likely is its way to be a straight one.

12. When a bullet has come to a rest in a person's body, it has done about all the

harm that it is destined to do and usually becomes incised. So that the great anxiety exhibited in ancient times to find the bullet and extract it is generally unnecessary. When found, however, it had better be removed for its moral effect, if for no other reason.

13. It is not always possible at first to estimate the damage a ball has done, but if any of the cavities of the body have been penetrated, these wounds must be treated

like other penetrating wounds of the cavities. In case of the abdomen, it should be opened and disinfected in the same manner, as though the wound was a stab wound.

14. Powder burns are apt to prove very indelible, if not treated properly at the outset, while inflammation is present. At that time they can usually be removed by applying, continuously for the first two days, a linseed poultice.

CHAPTER IX.

BURNS AND SCALDS.

Question. What is a burn?

Answer. An injury produced by contact with superheated solids or flame.

Ques. What are scalds?

Ans. Injuries produced by contact with superheated liquids or vapors.

Ques. What factors govern the severity of a scald or burn?

Ans. The degree of heat and the length of time the heated substance is in contact with the body.

Ques. What is the basis of classification of scalds and burns?

Ans. The depth to which the tissues are destroyed.

Ques. How are the different degrees defined?

Ans. 1. Scalds or burns that produce redness or rubefaction only.

2. Scalds or burns that produce vesication only, the cuticle alone being raised from the true skin, forming a blister filled with serum.

3. Scalds or burns that involve the true skin, to a greater or less extent, producing a yellow slough if a scald, and a black or brown scar if a burn, which has to be removed by a line of demarkation and separation, like any other dead tissue, leaving a cicatrix which contracts with great puckering.

4. Scalds and burns that destroy the skin and subcutaneous cellular tissue. The scar is similar to the third class, only more serious.

5. Scalds or burns that destroy all the soft parts over a certain area.

6. Burns that completely char the entire limb, bone and all.

Ques. How is death caused by burns or scalds?

Ans. 1. By oedema of the glottis from inhalation of flame or heated steam.

2. By shock from the great pain, so many of the superficial nerves being injured.

3. By arresting the heat regulating function of the skin, as well as the function of depuration. This is the case where a large surface of skin is burned over even to redness or vesication.

4. By inflammation of the internal or-

gans and serous membranes set up by the burns outside.

5. By exhaustion from prolonged suppuration.

6. By contraction of cicatricial tissue interfering with the function of important organs.

Ques. What are the important points in relation to burns and scalds?

Ans. 1. The danger of burns is in proportion to the amount of surface burned over.

2. Burns of the more severe degrees are always surrounded by burns of the lesser degrees, the severity decreasing as the healthy skin is approached.

3. In burns of the first degree unless death takes place within a few hours the patient generally recovers.

4. The large majority of deaths from burning are accidental, though the insane have been known to commit suicide that way.

5. Death by burning is frequently simulated for the purpose of defrauding life insurance companies, the parties substituting a dead body or skeleton for that of the insured and burning the house where the insured was supposed to live. The beneficiaries subsequently identifying the remains as those of the insured.

6. It is not infrequent that a murder is committed and the house subsequently burned to destroy the evidences of the crime, in which case the question would likely be: "Was death caused by burning?"

7. Burns on the dead body do not produce true vesication, while a body dead from burning is profusely blistered.

8. Wounds found on a burned body must be considered in the same manner as wounds on any other body, as to their nature and causation.

9. Large rents in the body may be produced from the effects of fire where the expansion is confined and heated steam bursts open the cavities. These must not be confounded with true wounds.

10. Fractures made previous to burning can often be distinguished from fractures of the burned bones by splintering and green stick appearance.

CHAPTER X.

POISONING.

Question. What is a poison?

Answer. Any substance which taken into the system or applied to the body tends to produce grievous bodily harm or cause death.

Ques. What different intents are covered by the statutes against poisoning?

Ans. 1. Against administering poisons with intent to kill.

2. Against administering poisons with intent to commit some other indictable offense, such, for instance, as drugging a person for the purpose of robbery, rape or kidnapping.

3. Against administering poisons with intent to do grievous bodily harm, such as throwing vitrol.

4. Against administering poisons with intent to aggrieve or annoy, such as giving Spanish fly for the purpose of arousing sexual excitement, or jalap for the purpose of causing violent purging.

Ques. In what different ways do poisons find entrance to the body?

Ans. 1. By ingestion or swallowing.

2. By inhalation (chloroform).

3. By hypodermic injection.

4. By enemata.

5. By contact with the skin (poison ivy).

6. By blistering (Cantharides).

Ques. How is the action of poisons modified in different persons?

Ans. 1. By the size of the dose.

2. By manner of administration.

3. By age of person to whom it is administered.

4. By sex of person to whom it is administered.

5. By habit of use (Opium and Tobacco).

6. By personal idiosyncrasy.

7. By climate.

8. By disease of body.

9. By combination of substances.

Ques. What facts of interest may be noted in connection with above answers?

Ans. 1. The size of dose by being increased may augment the violence of the symptoms of poisoning or by causing vomiting, prevent the absorption of the substance from the stomach and render it harmless.

2. Some poisons are harmless when swallowed, but deadly when coming in direct contact with the blood. The juices of the stomach seem to act as a chemical antidote.

3. The action of a drug is generally increased by hypodermic injection.

4. Some poisons effect the body much more powerfully when inhaled than when swallowed.

5. The younger the person is the stronger is the action of a poison as a rule. Yet some

drugs are well borne by children, as mercury, while opiates are especially active in children, and in practice must be administered, if at all, with greatest caution.

6. The condition of pregnancy in the female renders the administration of certain drugs especially dangerous on account of their action tending to produce abortion.

7. The habitual use of certain poisons creates such a tolerance that the dose may be increased to many times the amount that could be originally borne.

8. Some people bear a much larger quantity of a certain poison than others from a natural tolerance. Some are easily affected by extremely small doses of a certain poison for the same reason.

9. Cold climates enable people to bear large quantities of fats, while in hot climates fats and alcohols are much more dangerous.

10. The presence of inflammation increases the tolerance of opium, as also does the presence of great pain from any reason.

11. One poison frequently neutralizes the effect of another, thus rendering both innocuous, or it may greatly increase its effect. This may be due to chemical combination or it may act as a physiological antidote or accelerant.

Ques. How are poisons classified as regards their mode of action?

Ans. 1. Escarotics and corrosives, or those which destroy the tissues by direct contact. Example: Mineral acids and strong alkalis.

2. Irritants are those which produce their effect through local absorption. Example: Arsenic, Tartar Emetic.

3. Narcotics, those which produce their effect through their action on the nervous system. Example: Morphia, Strychnine, Canabis Indica.

Ques. How are poisoning cases classified for purpose of Medico-Legal study?

Ans. Into Homicidal, Suicidal and Accidental.

Ques. In selecting a poison with intent to commit murder, what primary objects must be fulfilled?

Ans. 1. The poison must be tasteless.

2. The poison must be deadly in small doses.

3. The poison must be colorless or white.

4. The action of the poison must be slow enough to give a little time for escape.

Ques. What poisons fill these indications best?

Ans. Arsenic, Tartar Emetic, Corrosive Sublimate and other irritants by absorption.

Ques. In selecting a poison with intent to commit suicide, what are the primary objects in view?

Ans. 1. The poison must be quick.
2. The poison must be certain.
3. The action of the poison should be painless as possible.

4. The poison must be easily procured.

Ques. What poisons fill these indications?

Ans. Morphia, Chloroform, Chloral.

Ques. What facts lead to the suspicion that a poison has been taken?

Ans. 1. Sudden and unexpected symptoms appearing in the midst of a fit of sickness.

2. Sudden and violent symptoms appearing in the midst of health.

3. The symptoms of poison appear either immediately or a short time after the ingestion of food or medicine containing it.

4. The symptoms appear without apparent cause.

5. When several persons partake of the same article of food and all suffer from like symptoms.

6. When poison is discovered in food taken or in vomited matters.

7. When poison is discovered on post mortem examination of the contents of the alimentary canal or in any of the bodily secretions through which it may be eliminated.

Ques. What facts concerning the post mortem appearances and symptoms should be noted in making examination of a supposed poisoning case?

Ans. 1. The exact nature of the symptoms.

2. The exact time of their occurrence.

3. The time elapsed since taking food or medicine.

4. The order in which the symptoms occurred.

5. Whether patient had been previously ill or in good health.

6. Whether symptoms occurred more violently after taking a particular meal or ingesting a particular food or medicine.

7. Whether patient has vomited, if so, give full description of the vomited matter, color, odor, reaction, quantity, etc.

8. The exact nature of the food or medicine taken.

9. If the symptoms followed a meal, note all the articles which composed the meal.

10. All suspected articles of food or medicine should be at once sealed up in chemically clean jars for subsequent analysis and properly labeled.

11. Take the statement of all parties present, in their own language.

12. Ascertain and note the names of all parties, through whose hands the suspected food or medicine had passed, in its purchase, preparation, or serving.

13. Whether more than one person had partaken of the suspected food and all suffered alike, or if some had partaken of it without ill effects.

14. Were the symptoms exhibited compatible with any ordinary disease.

15. Note any suspicious action on the part of any person present.

16. If poison be found on the premises hidden away, note the circumstances leading to the discovery of its location.

17. The appearance of the body should be described as given under the head of post mortem examinations.

18. In all searches about the premises, or in all post mortem examinations, notice to any accused parties should be given and a representative from their side of the case allowed.

19. The towels and linen used by the party supposed to have been poisoned should be inspected and all suspicious stains subjected to chemical analysis.

Ques. What are the legal questions to be decided by a chemical analysis?

Ans. 1. Does the substance analyzed contain poison?

2. What kind of poison is it?

3. In what quantity does it exist?

4. What was the approximate quantity originally administered?

5. How was it administered, in what mixture or vehicle?

6. Was the poison pure or mixed with other agents?

7. Is the poison such as might be found in the body through natural causes?

8. Was this poison the cause of death?

9. Were all re-agents and chemical utensils employed in the detection of the poison, chemically pure and clean?

10. Was the method of analysis employed the most likely of any to reveal a poison if one existed?

11. Was the poison administered with felonious intent?

12. Was the deceased in the habit of consuming this particular poison, as a cosmetic, stimulant or narcotic?

Ques. What are the most frequent criminal poisons?

Ans. Arsenic, Strichnia, Morphia, Hydrocyanic Acid, Antimony, Corrosive Sublimate, Canabis Indica, Cantharides, Ergot, Rue, Savin, Oxalic Acid, and Ptomaines.

Ques. What are the prominent points in the history of arsenical poisoning?

Ans. 1. Burning and pain in the stomach and bowels.

2. Violent vomiting and purging.

3. Strangury and bloody urine.

4. Swelling of waist, feet, hands and eyelids.

5. Convulsions.

6. Death by exhaustion.

7. Eroded and inflamed condition of the mucous membrane of stomach and intestines.

8. One or two grains may be a minimum fatal dose.

9. It may be detected qualitatively by the hydrogen test.

10. Death occurs in from four to thirty-six hours, the action begins in less than half an hour.

11. The antidote is hydrated, sesquioxide of iron, formed most conveniently by mixing ordinary Aqua Ammonia with Tincture of the Chloride of Iron. This should be freely diluted.

Ques. What is the history of strichnia poisoning?

Ans. 1. Symptoms begin a few minutes after ingestion.

2. Dryness of mouth and throat.

3. Pain in the jaws.

4. Convulsions increasing in severity and frequency.

5. Convulsions recur on the slightest movement or endeavor to take food or medicine.

6. Death comes by Coma, with the body in opisthotonus.

7. The post mortem appearances are those of eclampsia; congestion of the brain or small red spots of capillary apoplexy.

8. It is best detected by observing the effect of the hypodermic injection of some of the contents of the stomach or blood vessels under the skin of a frog. If strychnia, he will die the same death.

9. It is best treated by washing out the stomach and administering bromides and opiates or chloroform.

10. It kills in half an hour and if the patient outlives its first action, he will recover.

Ques. What is the history of a case of morphia poisoning?

Ans. 1. It acts soon, within half an hour.

2. When the habit has been acquired, large quantities may be borne.

3. Dryness of throat, hoarseness of voice, nausea, relief of pain, sleep, coma and death.

4. Pupils of the eye are much contracted.

5. Sickness, nausea and vomiting on recovery.

6. Its chemical detection is not very certain, and there are no post mortem appearances peculiar to death by morphia.

7. Death occurs in from four to twenty-four hours.

8. The best treatment is the ingestion of an antidotal solution of permanganate of potash. The same may be given hypodermically. The stomach should be washed out to prevent further absorption, the skin stimulated on the surface and the patient subjected to lively exercise.

Ques. What is the ordinary history of a case of Hydrocyanic Acid poisoning?

Ans. 1. The death is practically instantaneous.

2. The patient seems to die by syncope, the vitality of the heart being affected.

3. It is best detected by the odor, and the fact that the vapor arising from the opened abdominal cavity will turn a solution of nitrate of silver, in a watch glass, to the white insoluble cyanide.

4. There are no post mortem appearances, nor symptoms, nor antidote.

5. The action is so evanescent that if the dose was not a fatal one, recovery is speedy, usually within fifteen minutes.

6. Single drop doses, of Sheal's strength, is as much as can prudently be administered medicinally.

Ques. What is worthy of note concerning the other poisons mentioned?

Ans. 1. Antimony acts much like arsenic, as also does corrosive sublimate and oxalic acid.

2. Ergot, rue and savin are generally administered for the purpose of producing abortion. Their action is also of an irritant nature.

3. Cantharides is usually employed for the purpose of stimulating sexual desire and acts upon the genito-urinary mucous membrane, causing strangury, bloody urine, cystitis, nephritis and finally suppression of urine.

Ques. What are the poisons causing accidental death most frequently?

Ans. Carbolic acid gas, Chloroform, ether, cocaine, ordinary illuminating gas and ptomaines.

Ques. Whence are ptomain poisons most frequently derived?

Ans. Canned fruits, vegetables and meats which are not consumed at once on opening, but kept for a time. The poison develops from putrefactive change.

CHAPTER XI.

APNOEA.

Question. What is aponea?

Answer Death from non-oxygenation of the blood.

Ques. What are the symptoms?

Ans. 1. Lividity of face, lips and extremities.

2. Strong but ineffectual efforts to breathe.

3. Insensibility with irregular convulsive spasms, frothing from mouth and nose,

bleeding from all the orifices, involuntary discharges of faeces, urine, and semen.

4. Apparent death through failure of respiration.

5. Actual death through cessation of hearts' action.

Ques. What length of time is occupied by these symptoms, when the air is completely shut off from the blood?

Ans. Ten minutes at the outside.

Ques. What are the post mortem appearances peculiar to death by apnoea?

Ans. 1. Lividity of the mucous membranes and surface of the body.

2. The eyes are fixed and prominent and the tongue protruding.

3. Venous system gorged with blood and the arteries empty.

4. The right heart full and the left empty.

5. Minute stellate extravasations of blood under the serous and mucous membranes.

6. Puneta cruenta or minute apoplectic spots seen in the substance of the brain.

7. Rigor mortis generally slow coming on.

8. Blood generally fluid and dark in color.

Ques. How is apnoea classified?

Ans. Drowning.

2. Strangulation.

3. Hanging.

4. Smothering.

5. Suffocation.

Ques. What are the main questions to be determined in a case of suspected death from apnoea?

Ans. 1. Was the death by apnoea?

2. What class?

3. Was the apnoea homicidal, suicidal, or accidental?

DROWNING.

Ques. What is drowning?

Ans. It is that form of apnoea where the lungs are filled with liquid material, as also are the air passages, thus excluding the air.

Ques. What two sets of phenomena occur in cases of death by drowning?

Ans. 1. Those due to apnoea and perhaps syncope.

2. Those due to submergence in water.

Ques. What questions are to be considered in the examination of a body, supposed to have been drowned?

Ans. 1. Was death due to drowning or to some other cause and the body subsequently submerged?

2. How long has the body been submerged?

3. How soon after death by drowning will a body float?

4. Was the drowning homicidal, suicidal, or accidental?

Ques. What are the post mortem appearances peculiar to death by drowning?

Ans. 1. The body is usually found clutching the last thing in the grasp previous to death. ("Drowning men clutch at straws.")

2. If found floating, the head is generally a little out of the water.

3. Cutis anserina, or goose skin.

4. The face is apt to be rosy, red, or black and bloated if long submerged, but placid and white if soon rescued.

5. Bloody froth exudes from mouth and nose.

6. The palms of the hands and soles of the feet are corrugated like those of a washer-woman.

7. The eyes may be closed or open and staring.

8. The hands may be excoriated from the struggle to escape and may contain sand, gravel, twigs, grasses, or weeds.

9. There is generally retraction of the penis in the male, though sometimes it is found erect or semi-erect from being inflated by the gases of putrefaction.

10. Rigor mortis is rapid as also is putrefaction.

11. Presence of water in the stomach.

12. Presence of duckweed, shells, sand, dirt, and other substances, usually found in roily water, in the stomach are good evidences that the person was living when he entered the water and that death was certainly due to drowning.

13. In addition to these we are apt to find all the usual signs of death by apnoea.

Ques. What are the points on which we form an opinion as to how long a body has been submerged?

Ans. 1. First four or five days, no change takes place and rigor mortis persists.

2. After the fifth day, the skin in the palms of the hands and on the soles of the feet and balls of the great toes begins to whiten.

3. On or about the fifteenth day, the face begins to swell and get red and you can begin to see the green tint of putrefaction forming on the sternum and abdomen.

4. At the end of a month, the face is swollen and brown, the neck and chest green, the lungs swollen and emphysematous, on account of putrefactive gases, the scrotum is often swollen and the penis erect, from putrefactive gases in the cellular tissue.

5. At six or seven weeks the cuticle begins to strip off from the hands and feet, and the nails to loosen from the fingers and toes.

6. From the end of the third month adipocere begins to form and the process of putrefaction goes on more or less rapidly, until at the end of a year not much more than a skeleton or a saponified body remains.

Ques. What points are to be considered in forming an opinion as to the time required for a certain body to float, after death by drowning?

Ans. 1. Bodies float quicker in salt water than fresh on account of the greater specific gravity of the salt water, and a murdered body placed in salt water may not sink at all.

2. Weights about the body may retain it beneath the surface.

3. A very little gas forming of a putrefactive nature may cause a body to float if unattached.

4. Fat bodies float quicker than lean.

5. The warmer the water the more rapid

is putrefaction and the less will be the time required for the formation of putrefactive gases in the body.

6. The gas formed in a body may, on reaching the surface, be discharged and the body sink a second time.

7. Twenty-four hours is the shortest time in which a body has been known to float in fresh water.

8. If in salt water, a body be placed near the shore, so that the head rests on the bank, the feet will rise almost as soon as life be extinct.

9. Putrefaction is apt to be slower in water than in air, on account of the temperature being lower, as a rule, in the same climate.

Ques. From what points do we form an opinion as to whether a certain death by drowning was suicidal, homicidal, or accidental?

Ans. 1. The presence of wounds or signs of a struggle about the body.

2. The presence of weights attached to a body and the manner of their attachment.

3. The presence of substances in the hands may give some clue as to the locality where the body was precipitated into the water, and signs of a struggle may be found in that neighborhood.

4. The lungs and air passages are apt to show more injury from the effect of struggles incident to attempting escape from the water, in cases of accidental and homicidal drowning, than in cases of suicidal drowning, for in the latter case it is not infrequent to find the bloody froth absent.

5. All wounds found upon the body should be studied with reference to their own peculiarities, but the question should be considered as to the possibility of these wounds having been received from the current or waves forcing the body against rocks, snags, or other projections in the water.

6. Such wounds being found on bodies drowned in ponds or still water would be highly indicative of homicide.

7. The fact that death was due to some other cause than drowning and the body subsequently submerged, would be highly suspicious, as people do not dispose of dead bodies in that manner, which have died from natural causes.

8. The presence of a rope around the neck of a body might lead to the suspicion that death was not due to drowning, but to strangulation, another form of apnoea, and the body submerged for the purpose of masking the real cause of death.

9. A person intoxicated or narcotized may fall into very shallow water only sufficiently deep to cover the face, and being helpless and unable to extricate himself, drown.

10. The body being naked or dressed in swimming tights may indicate a bathing accident, if occurring in summer time.

11. Bathers have been known to dive into

water, more shallow than they thought, and striking the head violently upon a rock, inflict a contused or lacerated wound, easily mistaken for that of a blunt or uneven club instrument.

12. Dislocation of both arms and laceration of the perinaeum have accidentally occurred from jumping into the water from a considerable height.

Ques. What is the best treatment for prolonged submergence?

Ans. 1. Restore body heat with hot bottles and warm blankets.

2. Emesis and emptying of the stomach of water which has been swallowed.

3. Electricity and external stimulation.

4. Such medical treatment as would tend to diminish congestion of the lungs.

5. Death is frequent from injury to the lungs, even though there be life in the body when rescued from the water.

STRANGULATION.

Ques. What is strangulation?

Ans. It is that form of apnoea, where the air is shut off from the lungs by external constriction of the trachea, the constricting force being other than the weight of the victim's own body.

Ques. What questions must be considered in investigating a case of supposed death by strangulation?

Ans. 1. Was death due to strangulation?

2. What was the instrument or method used?

3. Was the strangulation homicidal, suicidal, or accidental?

Ques. What are the post mortem appearances peculiar to death by strangulation?

Ans. 1. Lividity of face, violet, dark red, and swollen.

2. Bleeding from mouth, nose, ears, and eyes.

3. Tongue swollen and protruding.

4. The hands are usually clinched.

5. The marks on the neck vary with the instrument and method used.

A. If the thumb and fingers of the assailant are used, the cartilages of the wind-pipe may be fractured and the marks of the ends of the digits be quite distinct, also scratches of the nails.

B. If a cord or ligature be used, there will be a horizontal mark or marks of the cord below the larynx. This mark is usually white with a stripe of ecchymosis above and below.

C. Occasionally but very little external marking is visible. In such a case it may be plainer under the skin.

D. Effusion of blood in loose areola tissue of the neck.

E. Frequently there is found rupture of the inner and middle coats of the carotid arteries.

F. Lividity and congestion of the lining membrane of the trachea and larynx.

G. Occasionally extreme injuries, such as fracture of the vertebra, ribs, or clavicles, are seen.

6. The brain is usually normal, but occasionally apoplectic clots are discovered.

7. The lungs show rupture of small air cells. The lungs appear as though lined with a thin, false membrane, but the ecchymotic stellate spots mentioned in apnoea are not usually found.

8. Pulmonary apoplexy usually found to some extent.

9. Other signs of death by apnoea.

Ques. What are the different methods used?

Ans. 1. Fingers and thumb, as in the English crime of garroting.

2. Small cord or lasso, as used by Indian thugs.

3. Metallic collar, as employed in judicial executions in Spain.

4. Occasionally a hard body like a stone wrapped in a handkerchief.

5. Silk handkerchief or narrow strip of cloth.

6. Suicidal women occasionally use their own hair.

7. Sometimes the knee or foot is placed on the neck.

Ques. What points are to be considered in forming an opinion as to whether a certain death by strangulation was homicidal, suicidal, or accidental?

Ans. 1. Strangulation always suggests homicide, especially if any wounds or bruises are present.

2. It is not infrequent that a person may be murdered by strangulation and the body subsequently suspended, to lead to the opinion that suicide had been committed by hanging.

3. There is much greater violence to neck and chest in strangulation, ordinarily, than in hanging.

4. A body may die by hanging and afterwards, by stretching of the cord or breaking of the same, fall down, but not die by strangulation and hang itself up.

5. Accidental strangulation may occur from foolish experiments. People desiring to investigate the sensations of asphyxia are sometimes caught and find it impossible to extricate themselves.

6. People sometimes indulge in partial strangulation for the purpose of exciting themselves sexually.

7. It is possible that flexing the head of a dead body upon the breast when cooling and stiffening may form a crease or wrinkle on the neck, along which the blood may settle, producing all the appearances of the mark of the cord in strangulation. This in case of death from pneumonia or other lung trouble may lead to very grave suspicion of foul play.

8. A person dying from apnoea induced by natural causes, may clutch at his or her throat with sufficient violence to leave scratches or bruises on the skin, simulating an attempt at strangulation.

9. When death by strangulation is evident and no means apparent, the cord or ligature having been removed, homicide is suggested.

10. The presence of bloody froth in the air passages of strangled persons, is suggestive of homicide.

11. Strangulation is a frequent method of infanticide, very slight pressure on the neck being sufficient to prevent respiration. This is occasionally done with the umbilical cord.

12. Injuries to the larynx or trachea, such as fracture of the cartilages or laceration of the mucous membrane, lining these passages are very frequently fatal, owing to the swelling and oedema which ensues. It is quite impossible to prevent infection in these wounds and pus formation is not uncommon. Patients die from the effects of garroting even though the cord or fingers be removed from the throat previous to death. The prognosis in these cases must be very guarded.

13. The treatment in these cases consists in blood letting, artificial respiration, electricity and stimulants, according to the degree of apnoea.

HANGING.

Ques. What is hanging?

Ans. That form of apnoea in which respiration is prevented by a ligature drawn tightly around the neck, the constricting force being the weight of the person's own body.

Ques. What are the most important modes of hanging?

Ans. 1. The lynching method, where a cord is noosed around the neck and the body suspended by drawing the other end of the cord over the branch of a tree, death resulting from pure apnoea.

2. The cart method employed in old-fashioned executions, where the cord is noosed around the neck, fastened overhead, and the floor removed, little or no drop being allowed, death resulting from pure apnoea. Suicides generally employ some method closely allied to this.

3. The long drop method, as employed in modern executions, where the cord is noosed around the neck the knot being placed under the ear or under the chin and the cord fastened overhead. The floor is then removed, allowing a drop of about ten feet, death resulting instantaneously from fracture or dislocation of the cervical vertebra or odontoid and consequent pressure on the upper part of the spinal cord or medulla oblongata.

4. The partial suspension method, the head simply resting in the noose, the feet

still touching the ground, death taking place from apnoea and coma mixed. The partial constriction around the neck allowing the blood to flow in the carotids, but preventing its return through the jugulars, the cessation of respiration being gradual.

5. The pressure method. Apnoea has at times been caused by simply leaning the neck upon the cord, no constriction being present, except in front, where the trachea was compressed between the cord and the neck. In these cases the neck muscles are rendered powerless before the victim has time to extricate himself. Death is from apnoea and coma mixed.

Ques. What two questions have to be considered in the investigation of a case of suspected death by hanging?

Ans. 1. Was death by hanging?
2. Was the hanging homicidal, suicidal, or accidental?

Ques. What are the post mortem appearances shown in death by hanging?

Ans. 1. In rigor mortis the head is generally flexed opposite to the location of the knot.

2. The face is congested and swollen, if the body has been suspended any length of time; this is particularly true if the constriction was gradual.

3. The tongue is swollen and livid, especially at the base, and generally protruding.

4. The pupils are dilated, eyes bulged and the crystalline lens usually fractured in a stellate manner.

5. The hands are tightly clinched.

6. Fæces, urine and seminal fluid are usually found staining the clothing.

7. The usual internal signs of death by apnoea are present.

8. Congestion of and apoplectic clots on the membranes of the brain are often found and puncta cruenta are numerous.

9. The genital organs are usually engorged with blood.

10. The stomach is often so much congested as to give rise to the suspicion that death has resulted from the administration of an irritant poison.

11. Injuries to the neck—

A. The injuries to the neck are similar when a body recently dead is suspended, but only a murderer would suspend a body, dead from some other cause.

B. The neck appears stretched.

C. In suicidal hanging the injury to the neck is generally slight.

D. The injury to the soft parts will depend upon the height of the fall and the length of time the body has been suspended. The cuticle is rubbed off, the muscles often torn, the laryngeal and tracheal cartilages crushed, the vertebra dislocated or fractured, the carotids and jugular veins divided.

E. The larynx and trachea are always congested red, but not brown or clay color

or violet. The latter colors are the result of putrefaction.

F. The larynx and trachea are often filled with a bloody froth and this is most constant when the stoppage of respiration is gradual.

G. When clots of blood are found in the vicinity of the injuries to the neck, it is evident that the body was alive when suspended.

H. The mark of the cord—

a. The mark of the cord is situated above the larynx and between that and the hyoid bone.

b. The mark is single if the cord was once around the neck and double if twice around.

c. The depth of the mark depends more upon the time that the body has been suspended than any other cause.

d. The mark may not be present at all, if the hanging was suicidal and the body soon taken down.

e. The mark is oblique with the highest point at the location of the knot.

f. The mark may not be continuous all the way around the neck, especially if the person was thin and the muscles well developed.

g. The mark is less distinct if the ligature be a soft one, such as a handkerchief or cloth bandage, and more distinct if a twisted hempen rope is used.

h. The mark is yellowish, leathery, condensed, and glistening, and the structures of the neck beneath the ligature very white and bloodless.

i. The ecchymosis and lividity are above the mark of the cord, while the pallor exists below it.

j. If the cord be small and the drop considerable, the victim may be beheaded.

12. No one sign here related is pathognomonic of death by hanging, but when the majority are present, the jurist will have little doubt.

13. Careful search should be made for other causes of death.

Ques. What facts must be considered in forming an opinion as to whether a certain case of suspension was homicidal, suicidal, or accidental?

Ans. 1. Death from hanging, otherwise than in a public manner, is strongly presumptive of suicide.

2. Death from other causes with the body found suspended, is presumptive of homicide.

3. Marks of violence on the hanged may have been produced by the person himself in attempt to commit suicide in some other manner.

4. Any wounds upon the body should be studied on their own merits and carefully described.

5. Marks of violence on the hanged are frequently due to accident.

6. Homicidal hanging presupposes great preponderance of force on the part of the assailant.

7. Accidental hanging is infrequent, but

has been known. In these cases the coil of rope becomes entangled around the neck and is not noosed.

8. When two marks of the cord are found and the rope around the neck but once, the presumption is homicidal by strangulation and subsequent suspension of the body.

9. A body may be completely suspended at first and subsequently the rope stretch or give way and the body be found with the feet touching the ground.

10. When a body is found dead by hanging and the rope gone, the fact is clear that the body has been interfered with after death.

11. Marks of violence on the backs of the hands are indicative of homicide.

12. The attitude of the body, state of the clothing and hair, as indicative of a struggle, may influence the opinion in favor of homicide.

13. Finding the body only partially suspended is indicative of suicide.

14. Occasionally the limbs have been found tied in undoubted cases of suicide.

15. A person may be homicidally hanged without any marks of violence, if intoxicated or narcotized at the time.

16. A person may take poison and afterwards hang himself before the poison has time to act. The poison may thus be found in the stomach on post mortem examination.

17. People occasionally die while experimenting upon themselves, for the purpose of ascertaining the sensations of death by hanging.

18. People sometimes partially asphyxiate themselves for the purpose of sexual stimulation.

19. It is well to study the moral and mental state of the victim previous to hanging, as this may have a great bearing upon the case and explain many of the circumstances present.

20. The question may arise as to the possibility of a certain cord having been sufficiently strong to have sustained the weight of a certain body. This fact may be ascertained by suspending a weight of some other material equal to the weight of the body from the same cord. This is of very little importance, for the cord may be very small and yet sufficiently strong to compress the trachea and cause death.

Ques. What is the prognosis in cases of suspension, when the body is taken down while still alive?

Ans. Unfavorable, though some cases have been saved when the injury to the structures of the neck was but slight. The most successful method of treatment is by phlebotomy, stimulation and artificial respiration.

SOTHERING.

Ques. What is smothering?

Ans. That form of apnoea where breathing is prevented by any means, other than

by filling the air passages with fluid and by external pressure on the trachea.

(Note—In most literature no distinction of any importance is made between smothering and suffocation. I propose in this work to confine suffocation to those forms of apnoea where the respiratory medium is alone at fault, and smothering to those cases where the act of breathing is prevented by mechanical means, thus making clear distinction between the two.)

Ques. In what different ways is smothering effected?

Ans. 1. Overlaying, which frequently occurs when infants are placed in bed with old people. Slight intoxication on the part of the adult may destroy the sense of the presence of the infant, and place it in the greatest danger.

2. By closely applying a hand, plaster, or a wet cloth over the mouth and nostrils.

3. By heavy weights pressing on the chest and abdomen.

4. By being buried by avalanches of earth, as frequently occurs to people working in mines and ditches.

5. By being drawn down in quicksands, or in the feed flow at a grain elevator. This latter accident is not a very infrequent one.

6. By having the head plunged in dust, snow, feathers, rags, wool, cotton, ashes, flour, mud, etc.

7. By plaster casts being applied over the face, forgetting to insert tubes in the nostrils.

8. By the presence of foreign bodies in the oesophagus.

9. By foreign bodies in the larynx, trachea, or bronchi.

10. By vomiting and regurgitation of food, the contents of the stomach blocking up the glottis.

11. By abscesses and tumors pressing on the air passages.

12. By clots of blood from wounds of the air passages.

13. By the tongue falling back and closing the glottis, as is frequently the case in the administration of anaesthetics.

14. By inflammatory swelling, as in oedema of the glottis.

15. By occlusion of the air passages by false membrane, as in diphtheria.

16. By paralysis of the lungs or respiratory muscles.

17. By double pleuritic effusion, either serum, blood, or pus.

18. By pulmonary apoplexy.

19. By destruction of lung tissue, as in consumption.

20. By solidification of lung tissue, as in pneumonia.

21. By diaphragmatic hernia.

22. By the trachea being cut across and the lower end impacted in the cellular and muscular tissue of the neck.

23. By the contraction of cicatricial tissue following burns.

24. By embolism of the pulmonary artery.

Ques. What is the legal presumption in cases of death by smothering?

Ans. The large majority of cases of smothering are due to accident or are the result of natural disease.

Ques. What points are to be considered in forming an opinion as to whether a given case of smothering was accidental, suicidal, or homicidal?

Ans. 1. Suicide by smothering is difficult.

2. In all cases of accidental smothering, the manner by which it occurred is apparent.

3. Homicidal smothering is generally confined to infants and helpless people.

4. Burke and Williams murdered their victims by smothering. They covered the faces and exerted great pressure on the breasts and abdomen. The bodies were disposed of to the Edinburgh Medical Colleges. This proceeding constitutes the crime of Burking—killing people for the purpose of selling their bodies to the medical colleges.

5. There are no post mortem signs that are strictly pathognomonic of death by smothering. All the signs of death by apnoea are present with the addition of the injuries produced by the original cause, whatever that may have been.

6. Children are frequently smothered during birth by compression of the cord or by the child's head becoming buried in the blood and filth of the bed, subsequent to labor.

7. That one adult should smother another adult presupposes great preponderance of force on the part of the assailant, unless the victim be weakened by intoxication, narcosis or disease.

SUFFOCATION.

Ques. What is suffocation?

Ans. It is that form of apnoea where death results on account of the prevention of proper oxygenation of the blood, through impurity, deficiency or impoverishment of the air supply.

Ques. In what ways is suffocation brought about?

Ans. 1. By carbonic acid poisoning, the oxygen having been consumed by breathing or by fires burning in the room. This occurs in a narrow apartment devoid of ventilation.

2. By carbonic acid poisoning, when that gas has been deposited in low places, such as wells or cellars.

3. By carbonic acid poisoning in mines, where the oxygen has been consumed by the explosion of fire damp.

4. By poisoning from ordinary illuminating gas, as frequently occurs from blowing out the gas.

5. By poisoning from the effects of ordinary anaesthetics, as in the administration of ether, chloroform, laughing gas, etc.

Ques. What is the legal presumption in death by suffocation?

Ans. The large majority of cases of death by suffocation are due to accident and ignorance. If the death is homicidal, it will have to be proven from other than medical evidence.

CHAPTER XII.

HEAT OR SUN STROKE.

Question. In what manner is death brought about when due to heat or sun strokes.

Ans. 1. By apnoea. The victim, generally a subject of chronic alcoholism, is exposed for a considerable time to the direct rays of the sun, so that thermic fever sets in. The temperature of the body is extremely high, face flushed and swollen, breathing difficult, pulse rapid and bounding, falls unconscious.

2. By syncope. The victim of delicate and feeble constitution, working hard in over-heated and over-crowded factories, becomes exhausted and sinks in a fainting fit. The face is pallid, extremities cold, body temperature sub-normal, pulse weak and fluttering, falls unconscious.

3. By coma. The victim exposed to the direct rays of the sun during the day and prevented from sleeping comfortably at night, on account of being worried by the cares of business, the heat or some other cause, contracts meningitis or cerebritis.

Delirium, insanity, stupor and insensibility follow from the pressure of effusion. Coma may result at once from apoplexy, the walls of the vessels giving way under the congestion which attends the thermic fever. This will lead to paralysis more or less extensive.

Ques. What is the true key to the treatment of these cases when found still alive?

Ans. 1. In the first set of cases where death approaches by apnoea, the external application of ice is indicated to reduce the thermic fever. This should be accompanied by phlebotomy, emetics, purgatives and general depletory measures.

2. In the second class of cases, where death approaches by syncope, stimulants of a diffusive character are indicated, fresh air, tonics and proper nourishment.

3. In the third class of cases, where death approaches by coma, there is indicated ice to the head and such sedatives as tend to produce natural sleep.

Ques. What facts in connection with death by heat stroke are of medico-legal importance?

Ans. 1. Those who are accustomed to live and work in a superheated atmosphere acquire a remarkable toleration for its effects. This habit must be acquired gradually.

2. When people, accustomed to temperate climates, attempt to live in the tropics, they should also assume the diet and habits of tropical natives. Meat and alcoholic drinks, freely indulged in, prove especially deleterious.

3. Aged people whose arteries have undergone natural calcareous degeneration are extremely liable to sudden death from exposure to great heat, if unaccustomed to its influences.

4. The diagnosis is frequently between acute alcoholism and heat stroke in a person who has been drinking. Owing to this fact the police frequently lock up in the hold-over, as common drunkards, men who should be properly sent to the dispensary for treatment. They are often surprised to find such

persons dead in the morning when they enter the cell for the purpose of taking their prisoners out for trial. Great care should be exercised during hot weather that such mistakes be not made.

5. In some cases of heat stroke, the body temperature reaches the great height of 110 or 113 degrees F.

6. Rigor mortis comes on very early in these cases, especially in the heart muscle, and does not last very long, so that it is not infrequent that we find putrefaction begun in the heart and large blood vessels within eight hours after death.

7. A temperature of 7 to 9 degrees above normal body heat, if continued for any length of time, will prove fatal.

8. The extreme degree of atmosphere heat that can be endured for a short time has never been determined, but as high as 400 to 600 degrees F was endured by Chabert, the fire king, on experiment. (Tidy's Legal Medicine.)

9. The thermic fever in these cases seems to be due to some action of the heat on the sympathetic nervous system.

CHAPTER XIII.

EXPOSURE TO COLD.

Question. What is the manner in which death is brought about when due to exposure to cold?

Answer. By syncope and coma mixed.

Ques. What facts are of medico-legal interest in connection with death from exposure to cold?

Ans. 1. The very young and the very old bear exposure to cold badly.

2. Young adults stand cold best.

3. Chronic alcoholism predisposes to death from cold.

4. Exhaustion and starvation predispose to death from cold.

5. Dampness and moisture and immersion in cold water accelerate death from cold.

6. On Arctic expeditions men have endured atmospheric cold equal to 100 degrees below zero, F.

7. Resuscitation may take place after extremities are frozen, if thawing be gradual, but local gangrene is a frequent result.

8. There is no reliable case on record where resuscitation has taken place after the complete freezing of the body in man, though this has been frequently done with the cold blooded animals, such as fish or reptiles, if thawing be gradually brought about.

9. The effects of extreme heat and extreme cold are somewhat similar on the circulation.

10. In sudden exposure to cold the capillary vessels become so contracted that the blood corpuscles are unable to enter them,

the circulation is therefore arrested except in the larger vessels. The oxygenation of the blood is imperfect and the blood corpuscles soon disorganize and are not restored unless the condition of the temperature is changed. In these cases on post mortem the large vessels are found full of blood, while the capillaries and small vessels are empty.

11. After death the surface is generally pallid except for dusky red patches, ecchymotic in nature and of considerable size, which are frequently found scattered over the surface and which contrast forcibly with the general whiteness of the skin.

12. Infants newly born have been murdered by exposing them to cold alone. When such a crime is committed, the proof is difficult and must be established negatively. That is, it must be shown that no other adequate cause of death existed.

13. Putrefaction does not take place while the body remains frozen, so that if a body be discovered frozen, in which putrefaction has somewhat advanced, one of two things must be true, either death must have been due to some other cause or the body must have thawed out for a time and become frozen again. The temperature that has existed in the days previous to the discovery of the body may have some bearing on the opinion which ought to be formed in any particular case.

CHAPTER XIV.

ELECTRIC SHOCK.

Question. In what manner does death take place when due to electric shock?

Answer. By coma and syncope mixed.

Ques. Under what circumstances do most electric shocks occur?

Ans. 1. By ordinary lightning stroke.

2. By accidentally handling charged wires in the occupation of electric lighting or while working with electric power machinery.

3. By judicial execution, as in New York State.

Ques. What facts are of medico-legal interest in connection with death from electric shock?

Ans. 1. Death, if it comes at all from this cause, is instantaneous. Those not killed at once generally recover more or less completely.

2. Burns of greater or less severity may occur from the electric sparks and death eventually proceed from these.

3. A person working on a high building or lofty pole, putting up wires, may be shocked sufficiently to make him lose hold and fall to the ground, death resulting from the fall and not from electric shock.

4. The symptoms of profound electric shock are those of brain concussion. Insensibility, deep, slow, interrupted respiration, slow, soft pulse, muscular relaxation are prominent at first, and catalepsy, tetany, convulsions, delirium, insanity or some form of paralysis may appear as improvement comes on.

5. Rigor mortis is usually sudden in these cases, the patient often being found in the same attitude in which he received the shock. In judicial executions the rigor was found present in four minutes after death.

6. In lightning stroke there are often

ecchymosed streaks over the body, which seem to mark the course of the electric current, but which are usually simply the marks of the veins, which have become the seat of rapid putrefaction.

7. Lacerated wounds of a greater or less size may be produced.

8. Fractures of the skull have been found both depressed and bulging, as though produced by an explosive force.

9. The clothing may be rent and torn, singed or entirely destroyed, and this without any injury to the body whatever.

10. All steel instruments about the body are generally found magnetized.

11. In judicial executions a pressure of 1,200 to 1,500 volts is used.

12. In these executions the flesh is usually found burned at the points where the metal electrodes came in contact with the body.

13. The blood is found fluid and purplish ecchymoses are often scattered over the skin.

14. The anterior cells of the cornea were found desquamated from the deeper portion as though by fire or great heat.

Ques. What sequelae are to be expected after partial recovery from an electric shock of electricity?

Ans. 1. Aphasia.

2. Insanity.

3. Epilepsy and catalepsy.

4. Vertigo.

5. Paralysis, either sensory or motor, local or general, or of some of the special senses.

6. In some cases the menstruation has been restored after it had been arrested for years by natural change of life.

CHAPTER XV.

STARVATION.

Question. In what manner does death come when due to starvation?

Answer. By syncope from asthenia.

Ques. In what classes may all cases of starvation be arranged for purposes of study?

Ans. 1. Acute starvation, where the person is suddenly deprived of both food and water.

2. Chronic starvation, where the person is put upon an insufficient allowance of food to sustain life.

3. Cases where the person is allowed plenty of water, but no food.

4. Cases where food is allowed, but no water.

5. Cases where improper or indigestible

food is furnished, causing such diseases as chronic diarrhoea and scurvy.

6. Cases where insufficient food is combined with exposure to cold and wet weather, the body being unprotected by proper clothing.

7. Cases complicated with obstructive disease of the alimentary canal. Here cancer or syphilis may bring an additional deleterious effect upon the system.

8. Cases where, on account of diseased conditions, the food taken is not digested or assimilated, thus leading to atrophic changes.

Ques. What are the symptoms of starvation?

Ans. 1. Sensation of hunger and thirst, continuous if starvation be chronic, but lasting only about forty-eight hours if starvation be acute, and frequently entirely absent if the starvation is due to obstructive disease.

2. Gradual increasing weakness, in all cases.

3. Sensation of coldness.

4. Progressive and rapid emaciation.

5. The skin is covered with a brownish exudation, like varnish and exhales a very offensive odor.

6. There is great pain felt in the region of the stomach, more especially in the chronic cases and those due to obstructive disease.

7. Extreme mental weakness, ocular illusions, mild delirium, or furious insanity in chronic cases, finally unconsciousness and death.

Ques. What are the post mortem appearances in death by starvation?

Ans. 1. Extreme emaciation.

2. The skin appears shrunken, like parchment.

3. There is entire absence of subcutaneous or inter-muscular fat.

4. Entire absence of food in stomach and intestines. These organs are found collapsed and small, and their coats thin.

5. The muscles and solid viscera appear shrunken.

6. Absence of other disease sufficient to cause death.

Ques. What time is required to produce death by starvation?

Ans. 1. In acute starvation, where the victim is entirely deprived of both food and water, about fourteen days.

2. Where water alone is allowed, a person has been known to live as long as forty-five days.

3. Where insufficient or improper food is allowed, or disease complicates the case, no opinion can be advanced, unless all the circumstances are known.

Ques. What facts are of medico-legal interest concerning death by starvation?

Ans. 1. Death by starvation may be accidental, suicidal or homicidal.

2. Homicide in this manner is not infrequent, the victims being infants, sick people, aged people, confined prisoners or lunatics.

3. Most of the suicidal cases occur among the insane.

4. Many cases of pretended fasting occur among hysterical people, and these frauds may occasion legal inquiry.

5. When these cases are watched closely, they have been known to starve to death rather than reveal the imposture.

6. Cruel and neglectful treatment, associated with the deprivation of proper food, doubtless forms one of the most criminal means, employed by so-called baby farmers for bringing about the demise of infants submitted to their care. This is especially true where a certain sum of money is paid at the time the child is placed in their charge and no further remittances forthcoming. When such persons are paid by the week it is, of course, to their interest to make the child live as long as possible and the children receive better treatment.

7. Proof in these cases is generally wanting, for this sort of treatment usually induces natural disease, which assists the deadly process materially and which on post mortem accounts for the death.

Ques. What is the best means of treating a patient who has been subjected to a prolonged fast?

Ans. 1. First restore body heat by placing the patient in a hot bath. This is very important and should on no account be neglected.

2. Administer concentrated liquid food, in small quantity, at short intervals, gradually increasing both dose and interval, as strength improves.

3. Tonics and nutrient drugs should also be administered, together with pepsins to assist digestion.

CHAPTER XVI.

SEXUAL JURISPRUDENCE.

Question. What sexual matters are likely to become the subject of legal investigation?

Answer. 1. Sexual life, puberty, climacteric.

2. Monstrosities.

3. Sexual malformations and deformities.

4. Impotency.

5. Sterility.

6. Eroticism and an eroticism.

7. Dyspareunia.

8. Virginity, Defloration, chastity.

9. Pregnancy, superfoetation, superfecundation, extra-uterine foetation.

10. Parturition.

11. Marriage.

12. Divorce and annulment of marriage.

13. Legitimacy, paternity, bastardy, affiliation.

14. Abortion, miscarriage, premature labor.

15. Rape, indecent assault, age of consent.

16. Sodomy and unnatural sexual crimes.

17. Incest.

18. Indecent exposure of the person.

19. Venereal disease.

20. Prostitution.

21. Live birth, infanticide, baby farming.

SEXUAL LIFE.

Ques. What is the duration of procreative life in the male?

Ans. From puberty on to old age indefinitely, the age limit differing in each individual.

Ques. What is the duration of procreative life in the female?

Ans. From puberty to the climacteric, usually a period of about thirty years.

Ques. What is meant by puberty?

Ans. Those changes produced in an individual under the influence of the development of the reproductive function.

Ques. At what age do these changes usually begin to show themselves?

Ans. Usually between the thirteenth and sixteenth years, but they have been known to show themselves very early and very late in life, and may remain latent altogether.

What are the signs of approaching puberty in the male?

Ans. 1. Increase in the size of the sexual organs.

2. The awakening of sexual desire, accompanied by erections and secretion of seminal fluid, containing living spermatozoa.

3. The appearance of pubic hair.

4. The appearance of beard and hair on the breasts and under the arms.

5. Change in the voice, the tone becoming deeper and falling from alto to base or tenor.

6. The skeleton assumes the distinctive male type.

7. Certain mental changes by which the boy becomes a man.

Ques. What are the signs of approaching puberty in the female?

Ans. 1. Increase in the size of the sexual organs, especially the breasts.

2. The appearance of the regular monthly flow of blood.

3. The awakening of sexual desire.

4. The appearance of pubic hair and hair under the arms.

5. Certain changes in bodily conformation by which the skeleton assumes the distinctive female type.

6. Certain mental changes by which is marked the girl's development into a woman, among which may be mentioned bashfulness, yet a growing desire for male society.

Ques. What signs normally mark the termination of sexual and procreative life in the male?

Ans. 1. Gradual weakening of sexual desire.

2. Gradual decrease in the frequency and power of erections.

3. Gradual disappearance of living spermatozoa from the seminal fluid.

4. Cessation of seminal emissions.

5. Increase in size of the prostate gland.

Ques. What is the age at which these changes appear?

Ans. About the sixtieth year, though living spermatozoa have been found in the seminal passages of men ninety years of age.

Ques. By what names is the termination of procreative life in the female known?

Ans. Climacteric, menopause, change of life, dodging period, etc.

Ques. What signs mark the approach of the climacteric?

Ans. 1. Irregularity in the time of the monthly flow.

2. Irregularity in the quantity of the monthly flow.

3. Cessation of ovulation and gradual atrophy of the ovaries, tubes and uterus.

4. Usually marked alteration in sexual desire, evinced by increase or decrease.

5. Increase in the quantity of abdominal fat.

6. Changes in the skin, which is apt to become swarthy, the subcutaneous fat becoming absorbed gradually, leaving the surface more or less wrinkled.

7. Certain nervous manifestations, due to auto-intoxication, from the retention in the system of those elements of the blood, usually eliminated by menstruation.

A. Hot flashes and blushing.

B. Vertigo and dizziness.

C. Ringing in the ears.

D. Numbness and formication.

E. Accumulation of gas in the abdominal viscera, which may give rise to the idea that woman is pregnant.

F. Possibly the formation of cancerous growths.

Ques. At what age do these changes usually make themselves manifest.

Ans. Generally about the forty-fifth year, though they have been known as early as the thirtieth year and as late as the seventieth. It is possible that menstruation may continue through life. As a rule, the earlier puberty the earlier the climacteric.

Ques. What external circumstances seem to advance or retard these developmental changes of puberty and climacteric?

Ans. 1. Warm climates seem to advance puberty, it frequently appearing as early as the tenth year.

2. Cold climates seem to retard puberty, it frequently delaying as late as the twentieth year.

3. Idleness, fast living, high feeding and erotic influences tend to advance development.

4. Normal exercise, proper diet and seclusion from erotic influences tend to delay development until the other portions of the body are equally perfect.

5. Over-work, poor feeding and bad hygienic surroundings tend to delay development.

6. Pathological conditions of the nervous system may advance or delay development, according to the locality affected and the nature and severity of the lesion.

7. Pathological conditions of other portions of the body than the nervous system

generally delay puberty and advance the climacteric.

8. Females of the Latin races usually lose their youthful appearance early after the thirtieth year.

9. Disease of the sexual organs themselves eventually tends to destroy function.

Ques. What two sets of laws have their foundation in the facts relating to the time of appearance and the duration of procreative life?

Ans. 1. All laws tending to limit the age for entering the marriage contract.

2. All laws which tend to limit the age at which a woman may give her consent to sexual intercourse.

Ques. What legal points depend for their solution upon a knowledge and recognition of these facts?

Ans. 1. The possibility of a woman having at any time been, or being now pregnant.

2. The possibility of a woman having recently, or at any time, given birth to a child.

3. The probability of a woman giving birth to a child some time in the future.

4. The probability of a man having been the father of a child at either extreme of life.

5. The probability of guilt in a case of alleged rape or other sexual crime.

CHAPTER XVII.

MONSTROSITIES.

Question. Into what two classes may all forms of malformation of the human body be divided?

Answer. Monstrosities and anomalies.

Ques. What is a monster?

Ans. A deformity or malformation extending over the entire body.

Ques. What is an anomaly?

Ans. A deformity or malformation of a single organ or set of organs.

Ques. Into what two classes may all monsters be divided?

Ans. 1. Monstrosities of a single individual.

2. Monstrosities composed of twins, joined together.

Ques. To what are monstrosities due?

Ans. To disturbances of development occurring in embryonic life.

Ques. What factors are prominent, as causes of developmental disturbance?

Ans. 1. Hereditary influence.

2. Injuries received during gestation, not sufficient to cause the death of the embryo.

Ques. At what period of interuterine life must these disturbances occur in order to produce malformation?

Ans. Previous to the end of the third month, for the foetus is perfectly formed by that time and cannot be changed. The earlier the injury occurs, the more serious the malformation.

DEFORMITIES OF THE SINGLE INDIVIDUAL.

Ques. What three classes comprise all the deformities of the single individual?

Ans. 1. Deformities by excess, where the number or size of the parts is increased.

2. Deformities by deficiency, where some of the parts are absent or decreased in size.

3. Deformities by perversion, where the organs are changed in shape or location.

Ques. What causative factor is most prominent about deformities by excess or perversion?

Ans. Hereditary influence, either direct from the parent or by atavism, *i. e.*, reversion to an original type.

Ques. What causative factor is most prominent in bringing about deformities by deficiency?

Ans. The accidental disturbances of foetal life.

Ques. Of what nature are these disturbances?

Ans. 1. Disease of the foetus.

2. Disease of the uterus.

3. Disease of the placenta.

4. Inflammation and adhesion of the amniotic membranes.

5. Concussion of the uterus and separation of the membranes.

6. Hemorrhage into the membranes.

7. Loss or deficiency of liquor amnii.

8. Bendings and twistings of the embryo.

9. Mechanical pressure on the embryo from tumors of the uterus or other causes.

10. Extra-uterine foetation.

11. Inflammation of any organ or part of the foetus, arresting its development.

12. Small-pox, scarlatina and syphilis of the mother or father, transmitted to the foetus.

Ques. What are some of the most prominent and noticeable manifestations of deformity by excess?

Ans. 1. Duplication of hands or feet; very rare.

2. Poly-dactylism, or duplication of fingers or toes; very common.

3. Poly-masia, or supernumerary breasts or nipples, frequent both in men and women.

4. Extra ribs, occasionally seen.

5. Extra teeth, frequently seen.

6. Duplication of thoracic and abdominal viscera, occasionally seen.

7. Excessive growth in one organ or part, out of all proportion to the rest of the body, occasionally seen.

8. Excessive growth of the entire body, as seen in giants.

Ques. What two sub-classes comprise all the cases of deformity by deficiency?

Ans. 1. Arrest of development and growth in the entire body.

2. Arrest of development in a part or parts of the body.

Ques. What are the most important manifestations of arrest of development in the entire body?

Ans. 1. Fleishy mole, a retrogressive alteration in the foetus and foetal membranes, produced by hemorrhage into the membranes.

2. Hydatidiform mole, a cystic degeneration of the foetus and its membranes.

3. Lithopaedion, a calcareous degeneration of the dead foetus.

4. Microsomia, a dwarfing of the entire body.

Ques. How may deformities in a part of the body be classified?

Ans. 1. Want of development in the head.

A. Acrania, absence of the cranial vault, bones and integument and usually the brain. The orbits are incomplete and the eyes project from the top of the head, giving the individual the appearance of a toad or frog.

B. Anacephalia, absence of the brain, always accompanied by acrania.

C. Cyclopia, both orbits grown into one, eyes absent, single, double, or rudimentary.

D. Hare lip and cleft palate.

E. Aprosopia or cleft face, from non-closure of the upper branchial arch.

F. Agnathia, absence of lower jaw.

G. Fissure in the neck from non-closure of the lower branchial arch.

2. Want of development in the trunk.

A. Spina bifida, well known.

B. Clefts in the thoracic wall, anterior or posterior, not often seen.

C. Acardia, no heart; only found in parasites.

D. Clefts in abdominal wall, usually combined with absence of bladder.

E. Want of union between alimentary canal and anus, causing complete closure of alimentary canal.

3. Want of development in the limbs.

A. Amelus, entire absence of limbs.

B. Peromelus, arms and thighs perfect, but forearms and legs stunted.

C. Phomelus, hands and feet sessile.

D. Micromelus, all limbs perfectly formed, but abnormally small.

E. Anabrachia, without arms.

F. Anapus, without legs or feet.

G. Symplus, lower limbs joined together; feet may be absent and the extremity furnished with toes.

H. Syndactylism, webbing of certain fingers or toes.

I. Adactylism, absence of certain fingers or toes.

Ques. What are the most important manifestations of altered or perverted development?

Ans. 1. Transposition of thoracic or abdominal viscera from one side to the other.

2. Club feet—

A. Talipes varus.

B. Talipes valgus.

C. Talipes equinus.

D. Talipes calcaneus.

E. Talipes equino, varus or valgus.

F. Talipes calcaneo, varus or valgus.

3. Sexual malformations and deformities. (See following chapter.)

TWIN MONSTROSITIES.

Ques. How are twin monstrosities classified?

Ans. 1. Double monsters, which are formed from the union of homologous twins of nearly equal development.

A. Where twins are united by a cartilaginous band extending between the two ensiform appendices.

B. Where twins have the same chest cavity, together with a double heart, the circulation being synchronous in both.

C. Where the trunks of the twins are united side to side, the chest and abdominal cavities being in common, the respiration as well as the circulation being synchronous, and a portion of the alimentary canal being in common also.

D. Where the union of the trunks is combined with a coalescence of the adjacent arms or legs of both.

E. Where the twins are united by the trunk and head, or the trunk, head and limbs, thus forming a complete side to side union. In these cases the viscera of one twin is transposed to the opposite side from the normal.

F. Where the heads are united and the bodies separate below.

G. Where the upper or lower limbs are united, the heads and bodies remaining separate.

H. Where the two bodies are united in one below, resulting in an individual with two heads, two sets of upper extremities, a common chest and abdominal cavity, one pelvis and one set of lower limbs.

I. Where the bodies have coalesced at the top, resulting in an individual with two sets of lower extremities, two pelves, two sets of genital organs, a common abdominal and chest cavity, one pair arms and one head.

J. Where the twins are united more or less completely, front to front, illustrating all the degrees of union shown in side coalescence.

K. Where the twins are united more or less completely back to back, spinal and cerebral cavities being in common. Where heads are so joined the individual is said to be Janus headed. This form of union may show all the degrees of side coalescence.

L. Where the twins are united end to end, either by heads or pelves. In the latter case

the legs are absent or project from the sides of the body, either coalesced or separate.

2. Foetus papyraceus, where homologous twins feed from the same placenta, the circulation of which is so arranged that one twin obtains more than its proportion of nourishment, thus starving and weakening the other. The growth of the victim is arrested and death takes place, the body being retained in a compressed and macerated condition until the birth of the healthy child.

3. Parasites. These are monstrosities which result from the unequal development of twins. The feebler twin remaining attached to the healthy one and obtaining all its nourishment through this attachment, as a parasite. These may be found attached to any part of the body of the healthy child, and developed to all degrees of perfection, from the mere marking of a few features or a few sessile limbs, to an almost fully formed foetus.

4. Inclusio-foetalis, where one twin, more or less completely developed, becomes inclosed in the body of the other. These may be found in any part of the body of the healthy child and in any degree of development from a few plates of bone, a few teeth and a few wisps of hair, as seen in the dermoid cyst, up to a fully formed foetus.

Ques. What questions are to be solved in making examination of a monstrosity for legal purposes?

Ans. 1. Is the offspring in the shape of mankind?

2. Was the child born living?

3. If living, is it capable of sustaining existence?

4. Is it single or double?

5. If double, is there separate consciousness?

6. If double, is it possible to safely separate them by a surgical operation?

7. Is it male or female?

8. If female, is it capable of intercourse or maternity?

9. If male, is it capable of intercourse or paternity?

10. If dead, what was the cause of death?

Ques. Of what importance are these questions?

Ans. 1. Every living product of conception, if in the shape of mankind, has social and civil rights.

A. It may inherit and transmit property.

B. It may sue in the courts and be sued.

C. It is entitled to personal protection at the hands of the law, and cannot be killed, hurt, or neglected, and its parents are bound to give it proper nourishment and care.

2. The father may obtain tenancy by courtesy in the mother's estate on account of this child.

3. The mother may in some states become entitled to a larger share in the father's estate on account of this child.

4. The questions of potency, paternity, and maternity, generally figure in divorce suits.

Ques. What sort of monsters would generally be considered as not being in the shape of mankind?

Ans. 1. Such remains of conceptive products as are usually found in dermoid cysts.

2. Such degenerated products as fleshy and hydatidiform moles.

3. Such bones and degenerated soft parts as are usually found in cases where an extra uterine foetation, instead of proving fatal, has become encysted and partially absorbed.

Ques. What cases are generally considered as not capable of continued existence, though born alive?

Ans. 1. Children expelled before the age of viability.

2. Acranial and anacephalous monsters.

3. All double monsters who have internal viscera in common.

4. All monsters who have faulty visceral development.

CHAPTER XVIII.

SEXUAL MALFORMATIONS AND DEFORMITIES.

Ques. Into what classes may all people be divided as regards their sexual conformation?

Ans. 1. Those who are monosexual, i. e., those who are normal, well developed males and females.

2. Those who are asexual, i. e., those who have no apparent sexual organs of any sort.

Those who are androgynus, i. e., males who through the absence, concealment or deficient development of some organ or organs are made to resemble the female.

4. Those who are Androgyna, i. e., females who through the excessive development of some organs and the rudimentary state of others, are made to resemble the male.

5. Those who have double organs of the same sex.

6. Those, who through disease or mutilation have lost one or more of their sexual organs.

7. Those who are hermaphrodites, i. e., those who have the characteristics of both sexes, more or less developed.

Ques. How are true hermaphrodites classified?

Ans. 1. Lateral hermaphrodites, where the sexual organs of the male are developed on one side of the body and those of the female on the other side.

2. Transverse hermaphrodites, where the internal sexual organs are of one sex and the external organs of the other.

3. Verticle hermaphrodites, or complete hermaphrodites, where the sexual organs of both sexes are developed, external and internal and on both sides.

Ques. Into what classes may the different forms of androgynus be divided?

Ans. 1. Crypsorchids, or those who are rendered androgynus through the fact that the testicles have remained concealed in the abdominal cavity or inguinal canals. The scrotum being cleft and the penis absent.

2. Monorchids, or those who are rendered androgynus through the fact that one testicle only has descended into the scrotum. The scrotum being cleft and the penis undeveloped.

3. Epispadias, or those who are rendered androgynus through the fact that the external sexual organs are absent through want of development of the anterior abdominal walls, the front wall of the bladder being absent and the ureters discharging their contents into a raw, red surface which should have been the posterior wall of the bladder.

4. Hypospadias, or those who are rendered androgynus through a want of development of the pendulous portion of the urethra the same opening below the penis and resembling a vagina, the scrotum being cleft and the penis poorly developed.

Ques. What are the usual characteristics of the androgyna?

Ans. The clitoris large, resembling a penis, the hymen and perhaps vagina imperforate and the labia majora adherent.

Ques. What facts in embryology constitute the present theory of causation in congenital sexual malformation?

Ans. 1. All individuals are, at one period of their embryonic existence, hermaphrodite.

2. Each sex possesses rudimentary organs which are analogous to the well developed characteristic organs of the other sex.

3. The differentiation of sex consists in the complete development of one set of organs, while the other set, appropriate to the opposite sex, remains in a latent rudimentary state.

4. Hermaphroditism consists in an attempt at a more or less complete development of both sets of organs.

Ques. From what embryonic structures are the internal sexual and urinary organs developed?

Ans. 1. The Wolffian bodies, which form on either side of the primitive spine about the beginning of the second month of foetal life.

2. The genital gland, which forms at the side of the wolffian body and subsequently becomes so intimately connected with it that it appears to have been developed from it.

Ques. By what stages is this development brought about?

Ans. 1. Formation of the wolffian body, a structure of minute tubes.

2. Formation of the genital gland, a structure of cells.

3. The union of these two bodies by the tubules of the wolffian body becoming intertwined with and permeating the cells of the genital gland.

4. The division of this combined body into three primitive structures.

A. The primitive kidney, from which sprouts out a tube, eventually becoming a ureter, and emptying through the elongated end of the alantoids into the cloaca.

B. The primitive testicle, whose cells are the primitive sperm cells of the genital gland, imbedded in a stroma formed from the tubules of the Wolffian body. These tubules eventually constitute the vassa efferentia of the epididymis and finally unite to form the vas deferens.

This duct appears even before the ureter, already mentioned.

C. The primitive ovary, whose cells are the primitive ova cells, also derived from the cells of the genital gland and whose stroma is developed from the tubules of the Wolffian body. Its ramifications are seen in adult life, in the par-ovarium, or organ of Rosen-Muller. From this body also proceeds a duct, known as the duct of Muller, which eventually becomes the fallopian tube, and finally through its union with the duct of the opposite side, the uterus and vagina.

5. The gradual growth and development of these bodies and their union with those of the opposite side, where such union is necessary.

6. The junction of the internal sexual and urinary organs with the external, which have been developing at the same time.

7. The descent of the testicles into the scrotum, in case of the male.

Ques. What are the stages in the development of the external genital organs?

Ans. 1. The formation of the cloacal opening, or primitive anus.

2. The formation of the genital eminence anterior to this opening from which develops the penis or clitoris.

3. The formation of the genital groove between the eminence and the cloacal opening, on each side of which develop the labiae majorae, or the two halves of the scrotum, which in the latter case eventually become united in a median raphe.

4. The formation of a partition wall, between the cloacal opening and the genital groove, thus forming an orifice to the urogenital sinus. This partition ultimately becomes the perineum.

5. The genital eminence develops in two folds, one on each side, which are tipped by bulbous points or projections, which ultimately become the two halves of the glans

penis or clitoris. In the female these folds become the labiae minora and in the male they become united at their free edges to form the urethra. The line of union remains, as the median raphe of the penis.

6. In the male a hard nodule occurs at the anterior enge of the Urogenital Sinus, which forms the prostrate and receives the ducts of Muller and the Utriculus Masculinus, formed by their union, also the seminal ducts and the elongated end of the alantois which becomes the bladder.

7. In the female the genital eminence remains undeveloped, normally, as the clitoris. The Urogenital Sinus remains open as the vestibule of the vagina and receives the ducts of Muller, united to form the uterus and vagina and also the elongated end of the alantois, which forms the bladder and the female urethra.

Ques. What organs seem to be analogous, in the two sexes?

Ans. 1. Penis of male and clitoris of female.

2. Scrotum of male and labiae majorae of female.

3. Prepuce of male and labiae minora of female.

4. Spongy portion of urethra of male and urethra in female.

5. Glands of Cowper in male and of Bartholini in female.

6. Sinus Pocularis and membranous portion of urethra of male and vagina and cervix uteri of female.

7. Vas deferrens of male and round ligament of female.

8. Epididymis of male and Parovarium of female.

9. Hydatid of Morgagni or Utriculus Masculinus of male and fallopian tubes and fundus uteri of female.

10. The primitive ovary remains undeveloped in the male and the primitive testicle in the female.

11. The mammary glands are analogous in both sexes, that of the male frequently functioning in infancy.

Ques. How are double organs of the same sex accounted for?

Ans. 1. Double uteri and vaginae from non-union of Muller's duct with that of the opposite side, the partition walls not absorbing between the two tubes.

2. Two penes are an attempt at twin formation.

Ques. What points are of especial value in diagnosing sex, in cases where doubt may exist?

Ans. 1. The external conformation of the body.

2. The growth of beard and hair on the breasts.

3. The prominence of the pomun-Adami and the pitch of the voice.

3. The presence or absence of menstruation.

5. The presence of seminal emissions.

6. The direction of sexual preference.

7. The presence of well developed sexual organs of either sex.

Ques. What is the legal bearing of sexual malformations?

Ans. 1. The social standing and education of the individual.

2. Privilege of assuming holy orders.

3. Privilege of voting.

4. Eligibility for marriage contract.

5. The question of paternity, impotency or sterility.

6. The question of inheritance under laws of primogeniture.

Ques. What is meant by primogeniture?

Ans. In some countries all the family real estate descends to the first born male child, by entail.

Ques. How do Androgynus and Androgyna individuals inherit?

Ans. According to the sex that doth prevail.

CHAPTER XIX.

IMPOTENCY AND STERILITY.

Question. What is impotency?

Answer. Inability to copulate.

Ques. What is sterility?

Ans. Inability to procreate children.

Ques. How are the causes of impotency in the male classified?

Ans. 1. Mental causes. (See chapter on Prycopathia Sexualis).

2. Physical causes.

Ques. What are the most important physical causes?

Ans. 1. Extremes of age.

2. Opium, Alcoholic and Tobacco habits.

3. Exhaustion from excessive venery or masturbation.

4. Concussion of spine or brain, paralyzing the erectile centers.

5. Diseases of the nervous system.

A. General paralysis, either senory or motor.

B. Paraplegia or Hemiplegia.

C. Diseases of nutritive centers, causing atrophy.

D. General nervous exhaustion, from over-work

E. Neurasthenia.

F. Deposit of syphilitic gummata

6. Exhaustion from general wasting wasting disease.

A. Acute fevers.

B. Diabetes.

C. Tuberculosis.
7. Reflex disturbance from other local diseases.

A. Perineal fistula.
B. Hemorrhoides and anal fissure.
C. Prostatic inflammation and hypertrophy.

D. Cystitis, particularly of neck of bladder.

E. Atrophic kidney.

8. Causes relating to the penis locally.

A. Absence of penis either congenital or acquired.

B. Small, undeveloped penis.

C. Large penis, disproportionate to the size of an ordinary vagina.

D. Large veins on dorsum of penis, interfering with the retention of blood in erection.

E. Adhesion of penis to scrotum or to abdominal wall.

F. Bad Hypospadias or Epispadias.

G. Injury to corpora cavernosa, as sometimes occurs from a broken cordee. In this case the posterior portion of penis is capable of erection while the distal portion is flaccid.

H. Double or bifid penis.

I. Stricture of the urethra, both from the reflex irritation it causes and from the stricture, on erection, forming a dam which prevents the expulsion of the seminal fluid.

J. Twisting of penis on erection.

K. Cancer of penis, both by destruction of penile tissue and by the excessive pain it causes on erection.

L. Gonorrhoea, acute on account of the pain it causes and chronic on account of the irritation and exhaustion, due to the long continued discharge.

M. Large chancroidal ulcers, on account of the severe pain.

9. Causes relating to the testicles, locally.

A. Absence of testicles, either congenital or acquired.

B. Cryptorchidism or Monorchidism, occasionally.

C. Cancer of testicle.

L. Orchitis.

E. Epididymitis.

F. Atrophy of testicles.

G. Small, undeveloped testicles.

H. Tumors of the testicle, either tubercular or syphilitic.

I. Varicocele.

J. Hydrocele, if large.

K. Large scrotal hernia.

L. The Atrophic effect of mumps.

10. The effect of certain drugs such as Bromides, Iodides, Lead, Camphor, Nitre, Coffee, etc.

Ques. What are the important causes of Impotency in the female?

Ans. 1. Absence of vagina.

2. Double vagina.

3. Obliteration of vagina, by inflammatory adhesions.

4. Imperforate hymen.

5. Small, shallow, undeveloped vagina.

6. Inversion of uterus.

7. Procentia of the uterus.

8. Vaginal tumors.

9. Ulcerations of vagina, causing pain.

10. Hemorrhoides and anal fissure, causing pain.

11. Urethritis and Cystitis, causing pain.

12. Large tumors of labiae.

13. Disease, known as Vaginismus, causing spasm. This is often a symptom of a small mucous curuncle, extremely painful to the touch.

Ques. What are the important causes of sterility in the male?

Ans. 1. Causes which prevent the elaboration of living, healthy spermatozoa:

A. Extremes of age.

B. Absence of testicles from castration or otherwise.

C. Undeveloped testicles.

E. Orchitis.

F. Mumps.

G. Cancerous, tubercular and syphilitic disease of testicle.

2. Causes which prevent the discharge of seminal fluid.

A. Gonorrhoeal Epididymitis.

B. Syphilitic Epididymitis.

C. Tubercular Epididymitis.

D. Traumatic destruction and closure of tubes, result of a blow.

E. Atrophy of the tubes from the pressure of a long standing varicocele.

F. Closure of the tubes from cancerous or sarcomatous deposit.

G. Stricture of Urethra.

H. Obliteration of seminal vesicles by inflammation.

I. Hypospadias and Epispadias, the seminal fluid being deposited outside the vagina.

3. Causes which temporarily arrest the production of the spermatozoa and the seminal fluid.

A. Exhaustion from excessive venery and masturbation.

B. Exhaustion from long continued wasting disease.

4. Occasionally a man and woman are found who are sterile with each other, but abundantly fruitful with other companions.

Ques. What are the important causes of sterility in the female?

Ans. 1. Causes which prevent ovulation.

A. Absence of ovaries congenital or acquired.

B. Cystic, cancerous, tubercular, syphilitic and inflammatory disease of the ovary.

C. Inflammatory disease of the peritoneum around the ovary.

D. Undeveloped ovaries.

E. Extremes of age.

2. Causes which tend to destroy the spermatozoa before they reach the ovum.

A. Continuous hemorrhage from diseased tissue inside the uterus and tubes.

B. Continuous acid discharges from vagina, which coagulate the seminal fluid.

C. Continuous viscid discharge from the cervix, plugging up the passage.

3. Causes which prevent the passage of the spermatozoa up to where it can come in contact with the ovum.

A. Flections and versions of the uterus.

B. Inversion of the uterus.

C. Contracted cervix.

L. Non junction of the uterus with the vagina.

E. Uterine and vaginal tumors.

F. Cicatricial folds from previous inflammation of vagina.

G. Rupture of the perineum subsequent to child-birth, allowing the seminal fluid to flow backward out of the vagina after intercourse.

4. Causes which obstruct the passage of the ovum downward through the tube.

A. Malposition of the ovary.

B. Binding down of the fimbriae of the Fallopian tube by inflammatory adhesions.

C. Obstructive disease of the tube itself.

5. Causes which temporarily arrest ovulation.

A. Exhaustion from excessive venery or masturbation.

B. Exhaustion from wasting diseases.

Ques. What questions must be considered, in making an examination of a case of suspected impotency or sterility?

Ans. 1. Does either impotency or sterility exist?

2. What is the cause?

3. Is the case curable?

4. From what time does it date approximately?

Ques. What is the legal importance of impotency and sterility?

Ans. 1. Impotency forms a legal bar to marriage.

2. Both impotency and sterility may be alleged as a reason for divorce.

3. Impotency, in order to affect the marriage contract must have existed prior to marriage and unknown to the plaintiff.

4. Impotency may be alleged as a defense to a suit for affiliation of an illegitimate child.

5. Impotency may be alleged as a defense to an action of rape.

Ques. What points are of medico-legal importance in connection with the subject of impotency and sterility?

Ans. 1. Sterility may exist without impotency in either the male or the female.

2. Theoretically a person may be impotent without being sterile, at the same time, but practically an impotent person is almost invariably childless on account of the impotency.

3. In cases of precocious development, a boy may become potent at a very early age, so that no opinion should be given in any

case without examination. The same is true at the other extreme of life.

4. In making an examination, it is sufficient to ascertain if any visible cause be present to render a person impotent or sterile. Any manipulation for the purpose of stimulating erection would be decidedly out of place.

5. The law cannot compel any person to submit to examination, though in case they do not submit the fact may be used in prejudice against their side of the case.

6. The law does not take cognizance of impotency due to mental causes, purely.

7. It is the custom among lawyers to apply the term impotency to men solely and the term sterility to women, because a large majority of the cases occur in that way, though as a fact, both conditions appear in either sex.

8. Hermaphrodites and sexually malformed people are nearly all sterile, though potency may exist.

9. Castration always renders a woman sterile.

10. Castration generally renders a man impotent and always sterile, but the sterility may not follow immediately after the operation, for there may be a supply of seminal fluid yet remaining in the vesiculæ seminales.

11. Occasionally when castration takes place after puberty, impotency may not follow for many years.

12. If in the castration of either male or female a part of an ovary or testicle remain, it would be impossible to assert positive sterility.

13. While, as a general rule, decrease of general strength in a wasting disease is accompanied with loss of sexual power, this is not always the case, for in the last stages of tuberculosis men have had sufficient sexual power to beget children, perhaps a few hours before death.

14. The majority of cryptorchids are sterile, though they are occasionally fruitful.

15. Where castration takes place in youth the effect is about the same as if the testicles were congenitally absent.

16. It is not warranted to declare a woman fertile just because there is a periodic bloody discharge, providing she has passed the usual age at which women cease to bear children, this bloody discharge may come from diseased tissues inside the uterus and not be the result of the process of ovulation at all.

17. Impotency, due to the advanced age of the party, forms no bar to marriage or excuse for divorce, for the legal presumption is that the procreative function does not disappear with age, but as a matter of fact it does disappear in nearly all cases.

18. It is a fact that where sexual potency is retained to a great age, mental and bodily vigor are also retained.

19. A very small penis is not a proof of sterility or even of complete impotency, for in these cases some degree of penetration may take place.

20. The sterility of a female is demon-

strable, as also is her fertility, while that of the male can only be determined problematically for "It is a wise son that knows his own father."

CHAPTER XX.

EROTICISM AND ANEROTICISM.

Question. To what do the terms Erotic-ism and Aneroticism refer?

Answer. To the presence or absence of the sexual appetite.

Ques. To what deviations from the normal is the sexual appetite subject?

Ans. 1. Excessive desire.

2. Diminished desire.

3. Perverted or peculiar desire.

Ques. Where do we look for the causes of these aberrations?

Ans. 1. To the brain, from such diseases as tend to stimulate or paralyze the procreative centers.

2. To the spinal cord, from such disease or injury as will tend to stimulate or paralyze the centers of generation located there.

3. To the general system, from such disease as would tend to cause general weakness and debility.

4. To the genital organs themselves, from all diseases and malformations that effect potency in the male and from all diseases, malformations and peculiarities of development in the female, that tend to prevent congestion of the erectile tissues.

5. To other organs in the vicinity of the sexual organs, such as the bladder and rectum, from such abnormal conditions as might, in a reflex manner, disturb the procreative function.

6. To the mind itself, as a result of education and the suggestions of the social environment.

Ques. Under what names are cases of excessive sexual desire described?

Ans. 1. Satyriasis, in the male.

2. Nymphomania, in the female.

Ques. What set of causes are mainly responsible for the cases of excessive sexual appetite?

Ans. Those diseases of the brain and spinal cord, which are characterized in their early stages by stimulation of the centers of generation.

Ques. What set of causes are mainly responsible for cases of diminished sexual desire?

Ans. Diseases and abnormal conditions of the genital organs themselves, reflex disturbances coming from abnormal conditions of neighboring organs, debilitating diseases of the general system, and those diseases of the brain and spinal cord which in their later stages are characterized by paralysis, either general or local.

Ques. What set of causes are mainly responsible for all cases of perverted or peculiar sexual desires?

Ans. These causes are nearly always resident in the mind itself and are generally the result of strong suggestions made at the period of sexual development. (See chapter on *Psycopathia Sexualis*.)

Ques. What points are of importance in the proper understanding of these variations of sexual appetite?

Ans. 1. Sexual desire may exist without pleasure in its gratification and pleasure may be experienced during intercourse without any desire being awakened.

2. Sexual desire may be present in the male without potency, and this leads to many of the disgusting deviations from the normal methods of gratification exhibited by old men and those who have weakened their sexual powers by prolonged excesses.

3. The experience of pleasurable sensations during intercourse has no bearing whatever upon the question of sterility or fruitfulness either in the male or female.

4. Among the females of the lower animals and among the women of most savage and primitive races, the sexual appetite exhibits periodicity as to the time of its appearance. During this period the appetite is practically irresistible.

5. Among such animals and among such tribes of people, the sexual desire of the male is not exhibited, except under the stimulation of the presence of a female with the periodic desire upon her.

6. Castration, subsequent to the full development of the sexual function, generally has but little effect upon either male or female, as to their sexual desire, though it usually renders the male impotent eventually. In the female the desire is often increased for a time, especially when the cause of previous aneroticism resided in the ovaries.

7. The large majority of cases of aneroticism occur in women and are due to such abnormal conditions of the sexual organs as follows:

A. Rupture of the perineum from previous parturition.

B. Profuse leucorrhoea, either vaginal or cervical.

C. Persistent tough hymen.

D. Dyspareunia.

E. Adhesion of labiae minoraе to the clitoris, preventing its proper erection.

8. The condition of aneroticism usually produces dyspareunia, eventually.

9. Aneroticism is frequently the immediate cause leading to domestic infelicity, which may end in divorce.

10. The courts do not recognize sexual frigidity as an excuse for divorce, but when this exists it is very easy to bring about such statutory grounds as will render marriage

intolerable and which the courts cannot overlook.

11. Connubial affection has a great deal to do with normal eroticism, and when the former is absent sexual desire often vanishes with it.

12. The refusal of the wife to permit the reasonable sexual approaches of the husband, without good cause, may be treated by the courts as equivalent to desertion.

CHAPTER XXI.

DYSPAREUNIA.

Question. What is Dyspareunia?

Answer. Painful coition, due to diseased or abnormally placed sexual organs.

Ques. What diseases cause dyspareunia in the male?

Ans. 1. Gonorrhoea, in the stage of cor-dee.

2. Prostatitis.

3. Inflammation of seminal vesicles.

4. Phymosis and paraphymosis.

5. Cicatrices from short circumcision.

6. Ulceration from chaneroids or cancer.

7. Warts and herpetic eruptions about the glands.

8. Orchitis and epididymitis.

9. Vesical and renal calculus.

Ques. What diseases cause dyspareunia in the female?

Ans. Contracted or disproportionate vagina.

2. Versions, flections, prolapsus, and inversion of the uterus, especially when the uterus is fixed by the inflammatory adhesions of pelvic peritonitis.

3. The presence of chronic or acute pelvic inflammation.

4. Displaced ovaries.

5. Abscess of the fallopian tubes.

6. Urethral curuncle.

7. Feruncles about the vulval orifice.

8. Small follicular ulcers about the vulva.

9. Anal fissure and hermorrhoides.

Ques. To what three remote causes are

most of the diseases which give rise to dyspareunia due?

Ans. 1. Improper attitude during coition.

2. Inequality as to the time at which the parties arrive at the sexual orgasm.

A. The man reaching the culmination before the woman, leaving her sexually aroused, yet entirely unsatisfied.

B. The man being extremely slow, reaching the culminating point only after the woman has become exhausted by repeated orgasms.

3. Improper dress, especially tight lacing to which so many modern women subject their waists. This compresses the pelvic organs and is a very prolific cause of displacements and inflammations.

Ques. What points are of special importance in connection with the subject of dyspareunia?

Ans. 1. The causes leading to dyspareunia in both the male and the female are usually removable, if proper treatment be employed.

2. Dyspareunia causes trouble by rendering the victim of it practically impotent, for a time, if not permanently. This leads to connubial infelicity and possibly to applications for divorce.

3. The courts do not recognize dyspareunia as an excuse for divorce, but other causes can soon be raised, when this is present.

CHAPTER XII.

VIRGINITY, DEFLORATION, CHASTITY.

Question. What fact forms the most prominent point of evidence, when the virginity of a woman is called in question?

Answer. The presence or absence of the Hymen.

Ques. What information is necessary to the proper understanding of this evidence?

Ans. 1. The first complete intercourse between young and active, adult persons, practically always ends in the destruction of a normally constructed and normally situated Hymen.

2. A Hymen situated far up the vagina may escape injury during intercourse.

3. An abnormally tough and fibrous Hymen may resist vaginal coition and only permit vulval penetration.

4. An abnormally lax and elastic Hymen may be stretched or pushed aside during intercourse and thus escape injury.

5. Vulval intercourse may take place where the male is an immature boy or a feeble old man, and an ordinary Hymen remain intact.

6. The Hymen is always situated high in children and a rape may take place with considerable injury to other parts and the Hymen escape rupture.

7. Though the Hymen may escape during intercourse, on account of the facts already related, yet labor at full term practically always destroys it.

8. The Hymen may of course persist, after, an abortion, before the foetus had acquired any appreciable size.

9. The Hymen once destroyed is never renewed, though inflammatory adhesions between vaginal surfaces may resemble it.

10. There are Hymens of every conceivable shape, but the large majority are crescentic in shape, and membranous in structure, and situated at the entrance of the vaginal passage, and are attended with more or less hemorrhage when ruptured.

11. The Hymen may be ruptured by accident or intent early in life.

12. The Hymen may be destroyed by ulceration from disease.

13. In forcible intercourse, even without consent, between old people, where the man is of weak virile power and the genitals of the woman relaxed by long continued menstruation or leucorrhoea, the injury is considerably less than between young and active persons, with the most free co-operation.

Ques. What particular points should be noted when absence of the Hymen is alleged as a proof of unchastity?

Ans. 1. Is the vagina dilated or contracted?

2. Are the small rugae, common to young virgins, present?

3. Are the carunculae myrtiformes present?

4. Are there any evidences of delivery, recent or remote?

5. Are the labiae rounded and full and closely approximated?

6. Are the breasts plump and tight to the body or flabby and drooping?

7. Is the areola pigmented?

8. Is the nipple developed or small?

9. What is the width of the areola?

10. Is there any chronic discharge present, to account for a relaxed state of the genitals?

11. What is the general moral appearance of the woman?

12. What is the past reputation of the woman?

Ques. What questions must be considered when the absence of a Hymen is alleged, as a proof that rape has been committed?

Ans. 1. Is the rupture recent or remote?

2. Is there a vaginal discharge present?

3. Are there any chancreoid or other ulcers present?

4. Is there any hemorrhage present or any evidence of any previous to the time of examination?

5. Are there any seminal stains on the clothing?

6. Is there any inflammation of the vaginal or vulval tissues, evinced by heat, pain, or swelling?

7. Is there difficulty of separating the thighs?

8. What is the attitude while walking?

9. How long since the alleged defloration took place?

10. Are there present any marks of a struggle?

11. Is the vagina dilated?

12. Was the rupture and dilatation produced by the male organ or by some other instrument?

13. Has there been any recent injury to the posterior commissure?

Ques. What are the important points in relation to the subject of defloration and chastity?

Ans. 1. While the appearance and general conduct of a woman may render any person, acquainted with the ways of the world, morally certain that she is unchaste, such opinions are intangible in a court of law and can only be admitted as matters of reputation.

2. In an adult virgin, the vagina is not usually injured at the first intercourse, and in a short time returns to its former appearance.

3. In a child great injury may be done by the entrance of the adult male organ.

4. When great injury is done, it is much more likely to be the work of the fingers or some other instrument, than of the penis.

5. Among the criminal classes in large cities, attempts are frequently made by parents and guardians, who have young female children under their charge, to dilate their genital organs by means of the fingers or some other instrument, such as wooden plugs, knife handles, clothes pins, etc., so as to render them capable of prostitution. It is also frequently noticed in India and among savage nations living in close proximity of military stations.

6. If any evidence of importance is to be obtained from an examination, it must be made early, for even in the young, where great injury resulted from the assault, the effects are quickly obliterated by the healing process of nature. It is of very frequent occurrence that women neglect to present themselves for examination until long after all signs of injury are gone.

7. It is impossible by examination only to establish the virginity, defloration or chastity of any woman, the evidence thus procured must be confirmed by other testimony.

Ques. In what legal complications may the virginity of a woman be called in question?

Ans. 1. In cases of alleged adultery, the defence may be set up that the co-respondent in the case is a virgin, and hence the defendant has never had intercourse with her.

2. In cases of alleged rape, the defence may claim that the prosecuting witness is a

virgin, and hence his innocence of the charge.

3. In cases where a suit is brought to set aside a marriage contract, the woman may claim that she is still a virgin and that the marriage has never been consummated.

4. In cases of libel and slander against a

woman's chastity, she may allege her virginity, in private prosecution.

5. A suit of this sort may be brought in defence of a woman's character after her death and examination may be ordered of her dead body for the purpose of ascertaining the truth in the matter.

CHAPTER XXIII.

PREGNANCY.

Ovulation, Menstruation, Conception, Multiple Pregnancy, Superfoetation, Superfecundation, Extra-Uterine Foetation, Parturition, Lactation:

Question. How are the above terms defined?

Ans. 1. Pregnancy is the condition of being with child.

2. Ovulation represents the process by which an egg cell is matured and discharged from the surface of the ovary.

3. Menstruation is a flow of blood mixed with uterine and tubular secretion, which takes place from the female womb every lunar month, except during pregnancy, lactation, or while suffering from some wasting disease. It commences with puberty and ends with the climacteric.

4. Conception represents the union of the spermatozoon with the ova cell.

5. Gestation is the process by which the impregnated ovum develops into a fully formed and full grown child.

6. Multiple pregnancy represents the condition, where two or more ova have been impregnated and are in process of gestation.

7. Superfoetation represents the condition, where two or more ova of the same ovulation have become impregnated by different men and are in process of gestation.

8. Super-fecundation represents the condition where a woman already pregnant, becomes a second time impregnated, during a subsequent ovulation.

9. Extra-Uterine-Foetation represents the condition where a child is developed outside the womb, such as in the tube, the ovary, or the general peritoneal cavity.

Ques. What questions must be considered in connection with the general subject of pregnancy?

Ans. 1. The time at which conception takes place.

2. The normal duration of gestation.

3. The shortest time at which a woman may give birth to a viable child.

4. The longest time that a woman may retain a child in utero.

5. The stage of pregnancy at which a woman has arrived.

6. The signs and diagnosis of pregnancy.

Ques. What facts are of importance to the proper understanding of the subject of ovulation?

Ans. 1. Ovulation is often coincident

with menstruation and that flow is stimulated by the process.

2. A Graffian follicle nearly ripe may be ruptured during coitus.

3. A Graffian follicle may mature, at about the same time, in each ovary.

4. Two or more ova may mature, at about the same time in the same ovary, so that both may be liberated from the same rupture.

5. It is supposed that ovulation may begin at a very early age, but it is very rare that a girl becomes pregnant before menstruation has been established.

6. Ovulation generally ceases at the menopause and it is a rare thing for a woman to become pregnant after the climacteric.

Ques. What facts are important to the proper understanding of the subject of conception?

Ans. 1. Conception may take place during menstruation, or at any time during the interval.

Ques. How is this explained?

Ans. A. Conception is not necessarily coincident with coitus or insemination.

B. It takes some time, two or three days, for the ovum to pass down through the tube and uterus and reach the vagina, during all of which time it is liable to impregnation.

C. The spermatozoa may retain life for four or five days in the genital passages of the female.

2. Conception may take place at any point after the ovum leaves the Graffian follicle until it reaches the cervix uteri, but generally takes place in the Fallopian tube.

Conception has been known to take place through an almost imperforate hymen, such as could not permit of complete intercourse at all.

4. Conception has been known to take place through a small utero-rectal fistula, where the vagina was altogether absent.

5. In case of incurable hypospadias in the male, impregnation has followed insemination by mechanical means. The seminal fluid being deposited on the vulva and being taken up with a syringe and injected into the uterus. "(It is a wise son that knows his own father.")

6. The fact that a certain woman does not bear children may not be due to non conception, but to the uterus being in a state of inability to mature an impregnated

ovum. The mucous membrane of the uterus being inflamed does not properly form the decidua.

7. Conception has been known to take place as early as nine years of age.

8. Women have borne children as late as sixty-five years of age.

9. It is a fact that most married women endeavor to prevent conception by every means possible, among the most frequent methods may be mentioned the following, all of which are injurious to the health and for the most part ineffective for the purpose for which they are used:

A. Injecting antiseptic solutions subsequent to coition.

B. Introducing sponges, cotton, etc., into the vagina to prevent the seminal fluid entering the uterus.

C. Nursing a child two or three years, until it gets the rickets or ostio-malacia.

D. The practice of withdrawing the penis before ejaculation takes place, leaving intercourse imperfect.

E. The wearing of shields and protectors by the male, which generally rupture at the time when they ought not.

F. The prevention of conception may be justifiable, in cases where a woman has been obliged to submit to Caesarian section or have a previous child subjected to craniotomy in order for it to be born, but this process seems to be the crime of the age. Those who are best able, financially, to assume the burden of a family, declining that duty, leaving the child bearing to the poor and ignorant classes, who do not find themselves smart enough to avoid it. ("A rich man for luck and a poor man for children.")

Ques. In making an attempt to compute the duration of gestation, from what point do we date conception?

Ans. 1. From a single coitus, where possible.

2. From the last menstruation, its day of commencement.

Ques. What is the usual duration of gestation?

Ans. About 280 days.

Ques. What is about the limit of variation of time in which a woman may bring forth an apparently mature child?

Ans. From 240 to 334 days, calculating from the beginning of the last menstruation.

Ques. What is the earliest period after conception at which a woman may be supposed to bring forth a viable child?

Ans. About 180 days, though a child younger than this may perhaps breathe and sustain life for an hour or two, after complete separation from the mother.

Ques. What is the longest period that a woman may retain a child in utero?

Ans. As to this question, no sound opinion can be given, for a dead child is often retained for a great length of time, especial-

ly in cases of Extra-Uterine-Foetation. The foetus may undergo changes of a calcareous nature, become encysted and only be removed by operation.

Ques. What are the signs of pregnancy, in the order of their appearance?

Ans. 1. The cessation of the menstrual flow, the blood being diverted to the purpose of nourishing the child, the membrane usually shed at this time, developing into the decidua.

2. Morning sickness and nausea, which is partially due to the reflex irritation occasioned by the presence of a growing body in the uterus and partially to the retaining in the system of certain products of life, usually eliminated by menstruation.

3. Enlargement of the breasts, occasionally attended with more or less pain, and at times milk appears, this latter is a somewhat rare occurrence.

4. Enlargement of the abdomen renders the clothing tighter.

5. Disturbance of digestion, constipation, loss of appetite, alteration in appetite, such as craving for certain articles of food, for which the patient seldom cares when in the normal condition.

6. Softening of the vaginal portion of the cervix uteri and the fundus appears larger and rounder.

7. Purplish or violet discoloration of the mucous membrane of the vulva, from venous obstruction in the pelvis.

8. Urinary disturbances, painful and frequent micturition.

9. Drowsiness, backache and vaginal leucorrhoea have been complained of.

10. Quickening and subsequently the increasing movements of the child.

Ques. What points of interest should be mentioned in connection with these objective signs?

Ans. 1. The menstrual flow may cease on account of approaching menopause if the woman be near the age in which she would naturally expect such a change.

2. The cessation of the flow may be due to approaching wasting disease, such as consumption or diabetes. The system using all the blood it can produce.

3. The flow may be obstructed by imperforate hymen or inflammation of the uterus.

4. The growth of ovarian tumors frequently obstructs the flow.

5. The flow may be diverted and what is known as vicarious menstruation take place. Women and girls who do not desire their pregnant condition known, often claim that they have had nose bleed and other losses of blood to account for the cessation.

6. The regular flow may possibly continue for two or three months after pregnancy begins. This is possible from the fact that it is some little time after conception before the cervix is completely closed by the well known plug of mucus.

7. It is claimed that some women menstruate during the entire pregnancy. Such women either have a biconuate uterus or the hemorrhage is from some ulceration of the cervix, induced by disease and the congestion incident upon obstructed circulation in the pelvis.

8. The value of this sign is good in a young and healthy woman, who does not suffer in any way, through her amenorrhoea.

9. The morning sickness may be due to kidney trouble or to alcoholism. When these two conditions can be excluded the sign is of value.

10. This sickness is often of little moment, some women claiming that their digestion is only good at the time they are pregnant.

11. The sickness is sometimes so severe that no food at all can be borne on the stomach and life is despaired of on account of the inanition.

12. Enlargement of the breasts occurs frequently in other conditions of enlarged abdomen, especially in cases of uterine fibroid tumors, but in cases where the health does not suffer it is a fairly reliable sign.

13. Enlargement of the abdomen may be due to uterine or ovarian tumors, to dropsy such as ascites or general anasarca. To enlarged liver, spleen or to pure accumulations of gas such as seen in what is known as phantom pregnancy.

14. The alterations due to disturbed circulation of the pelvis are of course common to all diseases where there is pelvic pressure.

15. Quickening is a pretty reliable sign, as far as the woman herself is concerned, but it may be simulated, even to her, by muscular contractions and the movement of gas in the intestines. It ought to appear about half way along pregnancy, or about the fourth and a half month.

Ques. What facts in the diagnosis of pregnancy are to be obtained by a complete examination?

Ans. 1. The height to which the uterus has arisen in the abdominal cavity.

A. At the end of the second month the uterus can be felt by pressure behind the symphysis pubes.

B. At the end of the third month the uterus is the size of a man's fist and the abdomen begins to become prominent.

C. At the end of the fourth month the fundus of the uterus has risen out of the pelvis.

D. At the end of the fifth month the fundus is half way between the symphysis pubes and the navel and white striae appear on the surface of the abdomen so as to add to the capacity of the skin.

E. At the sixth month the fundus rises to a point about two fingers' breadth below the navel.

F. At the end of seven months the fundus is two fingers' breadth above the navel.

G. At the end of the eighth month the fundus is half way between the navel and the epigastrium and the sides have spread considerably.

H. At the end of the ninth month the fundus has nearly or quite reached the epigastrium and has expanded laterally, though in the closing ten days the uterus sinks down into the pelvis.

2. Ballottement proves the presence of a movable foreign body in the uterus, floating in fluid. It consists in causing the uterus to move up quickly by pressure of the finger and allowing it to settle back against the finger. If a child be inside the rebound may be plainly felt. This may be felt as early as the fourth or fifth month.

3. The appearance of the beat of the foetal heart. This is a certain proof of pregnancy when discovered. It ought to be heard as early as the fifth month. The pulse beat sounds like the tick of a watch under the pillow and beats about 140 to the minute.

4. The marked movements of the child and the dropsy and enlarged veins, caused by pressure on the large vessels of the pelvis are sure symptoms along towards the latter months of pregnancy.

Ques. What points are of interest in connection with the examination of a woman to ascertain if she is pregnant?

Ans. 1. A point of considerable importance in regard to the enlargement of the abdomen is that the enlargement is located in the middle line beginning there and continuing there, if the pregnancy be normal.

2. Accumulations of gas are easily dispelled by administering a few whiffs of ether or chloroform.

3. It is not by one sign, or by two, but by a combination of all signs, that one can express an opinion, that a certain woman is pregnant.

4. In the early months of pregnancy before the sound of the foetal heart can be obtained, the opinion should certainly be guarded, especially in the case of an unmarried woman. If you only have a suspicion, keep that suspicion to yourself.

Ques. What legal questions may demand a diagnosis of pregnancy?

Ans. 1. A woman may be sentenced to be hung for murder or treason and claim a stay of execution, on account of alleged pregnancy.

2. An unmarried woman may become pregnant and bring suit against the reputed father of her unborn child for maintainance.

3. A man bringing suit for divorce may claim that his wife is living in open adultery and pregnant by another man. This may be denied by the wife and she may produce evidence to show the contrary.

4. An unmarried woman may be accused

of being pregnant and bring suit against her accusers for libel and submit herself to examination, to disprove their assertions.

Ques. What was the ancient method of procedure in these cases?

Ans. It was the custom to summon a jury, composed of twelve discreet matrons, who were to make examination of the woman and report to the court in session her true condition. These matrons generally found themselves as helpless as the court and usually had to call a physician to decide the matter for them.

Ques. How are multiple pregnancies explained?

Ans. 1. Two or more ova may escape at the same time, either from the same ovary or from different ovaries.

2. A single ovum may be double cleft.

Ques. What is about the proportion of multiple pregnancies to single births?

Ans. 1. Twins are said to occur about once in seventy-five labors.

2. Triplets in about once in five thousand labors.

3. Quadriplets are extremely rare, yet several are reported.

4. There are only two cases of quintuplets reported that are in any way authentic.

Ques. What cases are on record that might give rise to the assertion that a woman already pregnant with one foetus might become pregnant a second time at a subsequent ovulation?

Ans. 1. A woman five months after conception discharged a shrivelled foetus and a full grown child at full term.

2. A woman at full term gave birth to a healthy child and at the same time a dead six months' foetus.

3. A woman gave birth to a full grown mature child on the 30th of April and on the 16th of the following September to a second mature child.

4. A woman gave birth to two children, at an interval of thirty-three days.

5. A woman six months after marriage gave birth to a four months' foetus and at forty weeks gave birth to mature twins.

6. Another woman gave birth to two mature children at intervals of forty days.

7. Another woman gave birth to three children each fifteen days apart.

8. A woman gave birth to a mature child at full term on the 11th of February, and on the 25th of the same month to a dead four months' foetus.

9. A woman gave birth to a mature child on November 12th and on February 2d following, of a second mature child.

10. A man was killed, leaving his wife pregnant. Eight months after his death she gave birth to a deformed child, apparently mature, which died during delivery; thirty-one days thereafter she gave birth to a living child, perfectly formed.

11. A girl was accused of infanticide and

those who examined her claimed that she had been recently delivered. The girl claimed that she was still pregnant. She admitted that she had given birth to a dead child and made way with the body. Three months after this she was again confined and was delivered of a healthy and perfect child.

12. A woman gave birth to a child that lived to be 28 years of age and 174 days after gave birth to another mature child.

13. A woman had an abortion at the seventh month. Eight months after delivery she gave birth to a living child; no milk nor lochia appeared and the abdomen remained large. Five months and sixteen days after this delivery she was again confined and gave birth to a living child.

14. A woman gave birth to a six months' foetus and six weeks' foetus at the same time.

15. A woman gave birth to two children at about forty-eight hours interval, one mature and the other of about two months' development.

16. A woman gave birth to three children, one mature and living and two others dead and apparently about five months' development, the dead children had one placenta between them. One of the small ones was not thought to have been dead more than a week.

Ques. How are most of these cases explained?

Ans. 1. Most of the cases are twin pregnancies, both children having been conceived at the same time, an interval occurring between the two births.

A. Dead children often remain in the womb a considerable time after death.

B. A foetus may die and not be expelled from the uterus until its companion is full grown and both be born together.

C. A foetus may die and be expelled, its companion remaining until full time.

D. A mature child may be born and a dead foetus, which has been dead for four or five months, remain in the uterus and not be expelled for some time afterwards.

E. A mature child may be born and some days or weeks after, another mature child may be born. A few weeks over time does not often alter the appearance of a child; it would not necessarily cause the expulsion of the second to allow the first to pass out, although most physicians would deliver the remaining child at once and have the womb cleared out, lest hemorrhage follow the expulsion of one placenta, the womb not being contracted.

2. Some cases may be explained on the theory of a double uterus and vagina, allowing one uterus to become pregnant after the other was closed.

3. Some cases may be explained on the theory of a pre-existing Extra-Uterine-Foetation.

4. Some cases may possibly depend on the interval that may elapse between insemination and conception.

Ques. What cases should be allowed to be cases of true Superfecundation?

Ans. 1. Where both children are mature and the interval is at least two months.

2. If the first child born be mature and the second viable, the interval should be at least three months before Superfecundation can be admitted.

3. If both children are viable the interval being four months or more, Superfecundation may be admitted.

Ques. What proofs have we that Superfecundation is possible?

Ans. 1. A negro woman gave birth to a black child and a mulatto at the same birth.

2. A white woman gave birth to twins, one white and the other black.

3. A creole woman gave birth to triplets, one white, one black and one brown, each possessing all the characteristics of its race.

4. Mares have been known to give birth to twins, one a horse and one a mule.

5. Bitches frequently give birth to different varieties of pups at the same litter.

Ques. Upon what legal points do Superfecundation and Superfecundation have a bearing?

Ans. 1. Cases of legitimacy, where the husband has been absent from the wife.

2. Cases of legitimacy in posthumous children.

3. Cases of paternity and affiliation.

Ques. Of what interest to the Medical Jurist are cases of Extra-Uterine-Foetation?

Ans. Simply on account of their marvelous nature, they have no legal bearing.

Ques. What different varieties have been discovered?

Ans. 1. They have been developed half in the uterus and half in the tube.

2. They have been found entirely in the tube, both single and twins.

3. Twins have been found in one tube and a single child in the other tube.

4. A single child has been found in each tube.

5. They have been found in the peritoneal cavity, having burst out of the tube. These cases are generally fatal from hemorrhage at the time of the rupture, but occasionally the child develops in that locality.

6. They have been found in sacs, attached to the ovary.

7. They generally die before they become viable, but some have been extracted living.

8. They occasionally die and become incised and calcified, forming a lithopaedion.

Ques. Under what circumstances would a post mortem be likely to be called for the purpose of ascertaining the fact of pregnancy?

Ans. 1. Cases of doubtful identity.

2. In cases where accusations may have

been made against the character of a dead woman.

Ques. What are the signs of recent delivery?

Ans. 1. In many cases the woman will be prostrated by the exhaustion of parturition.

2. The pulse are apt to be quicker than normal and more compressible.

3. There exists a peculiar odor of the vaginal secretions about the bed.

4. The skin is often moist, soft and relaxed.

5. The breasts are usually swollen with milk, after the third day.

6. The skin of the abdomen is flacid and thrown into folds, like a checker board and apt to be covered with white shining streaks, which contain no pigment cells like the other skin.

7. The uterus is felt at the bottom of the abdomen about the size of the foetal head, and grows smaller, as the time increases.

8. The lochial discharge is present.

9. If the labor has been very recent, blood clots will be most likely in the vagina.

10. On examination with the finger, the uterus is found large and the dilated cervix gaping. The margin will likely be found torn.

11. The perrineum will most likely be found lacerated to a certain extent, especially in first labors.

12. The lochial discharge, which is red at first, becomes green as time goes on.

Ques. What points are of importance in connection with the examination for the purpose of ascertaining if recent delivery has taken place?

Ans. 1. The increased size and depth of the uterus may be due to tumors, hypertrophy, or hydatid cyst.

2. Delivery does not necessarily render a woman confined to her bed, or even give her the appearance of illness. This is especially true of abortions. It is also true among savage people.

3. Bleeding and leucorrhoeal discharge may come from polypoid growths or uterine fibroid tumors.

4. The breasts may contain milk when the abdomen becomes enlarged from other causes than pregnancy and delivery.

5. It is not to any one sign alone, but to a combination of all these signs that a physician should owe his opinion that a woman has been recently delivered.

Ques. Under what circumstances may a woman fairly be supposed to have been unconscious of pregnancy or delivery?

Ans. 1. Women may be raped while in a state of unconsciousness from intoxication.

2. She might be unconscious of her pregnancy during the early months, but it is impossible that she should not suspect her condition, long before the normal time of delivery.

3. Under the influence of anaesthetics, women are usually unconscious of delivery.

4. There are occasional cases where women fall into a sort of a lethargic state as soon as labor comes on and do not come out of it until delivered.

5. When suffering from the unconsciousness of eclampsia, a woman may be delivered and not able to attend her child in any way.

6. In cases of placenta previa, a woman may faint away from hemorrhage and be unconscious of delivery.

7. It is a fact that some women suffer a great deal more than others in natural delivery and I have seen women delivered myself who did not suffer enough pain to have woken up an ordinary person, as far as complaints and appearances went.

8. It is quite possible that a woman may not recognize the fact that she is in labor until she finds herself delivered, especially in first labors, when delivery is easy.

Ques. What facts are of importance in regard to post mortem delivery?

Ans. 1. Parturition may take place after death without any assistance of art or any signs of labor previous to death.

2. All the accidents of ordinary labor may occur at a post mortem parturition.

3. It may be caused by post mortem contractility of the uterus or from the compression of putrefactive gases, the latter is the most frequent cause.

4. A child may live in the uterus some hours after the death of the mother.

Ques. What signs would lead to the opinion that a woman had during her life given birth to a child?

Ans. 1. The presence or the hymen is proof positive that no mature child has ever been born by the natural way.

2. Caesarian section always leaves a considerable scar.

3. Great caution should exist in pronouncing a tumor containing hair, bone, etc., to be the result of an Extra-Uterine Foetation, as it might be a dermoid cyst or an inclusio foetalis. They are often found in men and boys, or in very young female children.

4. Linea Albicantes may be caused by ovarian tumors, ascites, etc.

5. A relaxed and torn condition of the genitals may be produced by disease or accident, but is one of the signs of previous delivery.

6. If the breasts retain their virginal

character, the probability is against the woman having borne children.

7. If the posterior commissure is intact, the probability is very much against a woman having given birth to a child, at full term.

8. The presence of large varices of the veins of the lower limbs are a sign of previous pregnancy, or at least, of pressure on the iliac veins.

9. The presence of matured corpora lutea in the ovary is a very strong and valuable sign. It is thought not to occur from any other cause than pregnancy.

10. Certain changes in the uterus itself are indicative of previous pregnancy.

A. The smoothing out of the arbor vitae.

B. The top of the fundus becomes convex instead of flat.

C. The size of the cavity is increased.

D. The anterior and posterior surfaces are more rounded.

E. The os becomes puckered instead of round or linea.

F. The uterus that has borne children never returns to quite its normal size.

G. It is not to one sign or to two, but to all combined, that one must owe an opinion.

Ques. What legal questions require an examination to ascertain whether a woman has given birth to a child, either recently or at a remote period?

Ans. 1. A charge may be made against the character of an unmarried woman.

2. Doubt may be thrown on the fidelity of a wife, in case of long absence of the husband.

3. A woman may be accused of infanticide.

4. A man may be suspicious as to the chastity of his wife before marriage.

Ques. How long must it be after giving birth to one child before another mature child may be expected?

Ans. Fourteen days is about the earliest time, after delivery, that a woman may become pregnant. In most cases thirty days, at least, must elapse. Three hundred and ten days ought to elapse between one mature child and another, unless we admit the possibility of superfecundation in the case.

Ques. What rule should be invariably observed in all cases where an examination into the question of pregnancy, either past or present, is to be made?

Ans. Never examine a woman without her consent and request in writing; if she is unable to write, in the presence of witnesses who are entirely disinterested.

CHAPTER XXIV.

MARRIAGE AND DIVORCE OR ANNULLMENT.

Question. What is marriage?

Answer. It is a simple contract, entered into between a man and a woman, to live together in the relation of husband and wife.

Ques. What qualifications are necessary to render a man or a woman eligible to enter a marriage contract?

Ans. 1. They must be of sufficient age to make a contract binding upon themselves.

2. Neither party must have another husband or wife at the time.

3. Both parties must be of sound and disposing mind.

4. The parties must not be of blood relation within the prohibited degrees.

5. Impotency must not exist in either party.

Ques. What points are of interest in connection with the subject of marriage?

Ans. 1. The contract may be either verbal or written and must show present desire and intention of one party, at least, to enter the marriage relation.

2. No religious ceremony is necessary in this country to render a marriage valid.

3. Witnesses are not necessary, though the marriage is more easily proved if such be present.

4. Where the state laws require a license, the neglect to obtain such does not render the contract invalid, but subjects the parties to a penalty of some sort.

5. If the parties desire the marriage recorded, it must be entered into before a minister or a magistrate or some person designated by the law.

6. If a marriage is valid in the place where it is made, it is held to be valid everywhere else.

7. Immediately upon marriage the husband becomes entitled to courtesy in his wife's estate and the wife to dower in her husband's estate.

8. A minor arrived at the age of consent may enter the marriage contract. This remains valid until the minor arrives at the age of twenty-one years, when, as in any other contract, he may set the marriage aside. The woman may do the same.

9. A marriage obtained by fraud upon an innocent party may be set aside.

10. A marriage valid at the time it was contracted can only be set aside by the death of one of the parties or by divorce.

11. A husband is liable for the wrongs or torts of the wife and may be joined in any suit to recover damages from the wife.

12. No husband and wife can make a contract between themselves, which will hold, subsequent to marriage.

13. The husband is bound to furnish for his wife the necessities of life, such as may be appropriate to their social station. Such

things may be purchased by the wife on the credit of her husband.

14. If a wife leave her husband's table and bed without his consent, by advertising such fact, he cannot be held responsible for any bills she may make.

15. If a wife leave a man's table and bed on account of his extreme cruelty or fault of his to provide for her in a suitable manner, it does not relieve him of the financial responsibility of her necessary expenses.

16. If a man marry a woman, widow, or otherwise, with children, he becomes liable for the support of these children.

17. No law can render an incestuous or bigamous marriage valid.

Ques. What is the difference between dower and courtesy, as mentioned in point 7?

Ans. 1. A wife's dower is a right of life occupancy in any real estate the husband may acquire during his life time. He cannot dispose of it without her consent and signature.

2. A husband's courtesy is only a right of life occupancy in any real estate that the wife may leave at her death.

3. This right of dower or courtesy may depend upon the wife having given birth to a living child during the existence of the marriage contract.

Ques. When may the right in relation to impotency, on the part of the man, be supposed to have been waived by the woman?

Ans. When she marries a man who would naturally have reached the point of impotency through great age, and when she marries a man knowing him to be impotent.

Ques. What is the procedure when one party complains that the other party to the marriage contract refuses to participate in sexual intercourse?

Ans. If not otherwise explained, incapacity is presupposed.

Ques. What is generally meant by the proscribed limits of relationship?

Ans. The parties must not be of nearer relationship than first cousin, either by full or half blood, by legitimate or illegitimate connection.

Ques. What two kinds of divorce have we?

Ans. 1. From the bonds of matrimony.

2. From bed and board.

Ques. What are generally considered good and sufficient reasons for granting divorce?

Ans. 1. Fraud in entering the contract by either party.

A. Incapacity for sexual intercourse.

B. Known sterility on the part of the wife, such as a previous ovariectomy.

C. A man marrying a woman whom, un-

known to him, is pregnant by another man, he believing her chaste, may charge her with fraud.

D. Should a woman, representing herself as chaste, engage herself to a man and then entice him into sexual intercourse with her, in contemplation of such anticipated marriage, and for the purpose of precluding him from afterwards claiming a divorce, because he would then have married her knowing her unchaste, such active fraud on her part, coupled with pregnancy, would be sufficient to give him a divorce.

2. Impotency on the part of either husband or wife.

A. The impotency must have existed before marriage.

B. The impotency must have been unknown to the petitioner.

C. The impotency must be incurable.

D. A physician's certificate as to impotency is not sufficient, the physician must appear in court.

E. The defendant must submit to examination.

F. The physician may examine by inspection only, no manipulation for the purpose of exciting erection is necessary or proper.

G. A failure to consummate marriage after three years of cohabitation is presumptive evidence of impotency.

H. It is not necessary to prove impotency with all women, but only as far as the petitioner is concerned.

I. The complaint must be made within a reasonable time after marriage.

3. The permanent loss of reason by either husband or wife may be considered a reason for divorce, but this is usual.

4. Intolerable cruelty and abusive treatment, endangering life or reason.

A. Communication of a venereal disease by either party.

B. Persistent and unreasonable refusal to participate in sexual intercourse.

C. If a man compels his wife to submit to intercourse so frequently as to impair her health, she would be granted a divorce.

D. Habitual and persistent drunkenness by either party.

E. The acquirement of a loathsome chronic disease, such as leprosy or syphilis, by either party.

5. For adultery on the part of either husband or wife.

A. The intercourse must be with wrongful intent.

B. Rape of the woman would not be considered adultery.

C. Nymphomania or satyriasis would not be considered excuse.

D. It is sufficient to show that the defendant spent the night in the same room with the co-respondent, or that they registered at a hotel as man and wife. Express intercourse need not be shown.

6. Desertion and neglect to contribute to the support of the wife may be held sufficient cause for divorce.

A. Absence for two years without consent constitutes desertion.

B. Absence seven years with no communication gives reasonable presumption of death, and the deserted party may marry again.

Ques. What may be alleged as a defense for these grounds of divorce?

Ans. 1. The adultery of one will offset the adultery of the other.

2. The desertion of one will offset the adultery of the other.

3. Condonation or forgiveness is held where intercourse has been had subsequent to the cause for divorce being known.

4. Extreme cruelty will offset a charge of adultery, such cruelty as may endanger life or limb.

Ques. What points are of especial interest regarding divorce?

Ans. 1. The statutes of each state determine all rules regulating divorce.

2. It must not be supposed that the treatment which would be considered intolerable and abusive in one class of society would be so considered in another.

3. The same allowance which would be considered ample for people in one class of society to live upon would be beggarly for another class. This effects the amount of alimony that might be reasonably demanded.

4. In some states the guilty party from whom the petitioner for divorce is separated is not allowed to marry again, but the person may go into another state where no such law exists and marry again and the marriage, being valid in the state where it occurred, would make it valid in the state where the divorce was granted.

5. Divorce is not intended as a punishment against the offender, but as a relief to the one offended.

6. If there appears to be anything like collusion between the parties to secure a divorce, it will not be granted, for it is the policy of the law to maintain the unity of the home in all cases where possible, especially where there are any children.

7. Matters of marriage and divorce were anciently considered strictly in the control of the church and they were settled in the Ecclesiastical courts.

CHAPTER XXV.

LEGITIMACY, PATERNITY, BASTARDY AND AFFILIATION

Question. What children are legitimate?

Ans. 1. All children born in lawful wedlock are legitimate, except impotency or non-access of the husband be proved.

2. Children born in wedlock, though conceived previous to the marriage of the parents, are legitimate.

3. Children born out of wedlock become legitimate on the subsequent marriage of the parents.

4. Posthumous children are legitimate if born within a reasonable time of the husband's death, unless impotency or non-access are shown.

5. Children born by Caesarian section after the death of the mother are legitimate, though the father does not acquire tenancy by courtesy in the mother's estate on account of such child.

Ques. What children are illegitimate?

Ans. 1. Children born out of wedlock while the parents remain unmarried.

2. Children born in wedlock where the wife lives apart from her husband in open adultery.

3. Children conceived in wedlock, but born after the divorce of the parents.

Ques. In what sort of cases does the question of legitimacy have to be investigated?

Ans. 1. Where a child is born after the husband's death, or a little before his death, his health having failed some time previously.

2. Where a child is born shortly after marriage, or after the long absence of the husband.

3. Where one child is born and after a comparatively short interval, another.

4. Where a woman marries a second time soon after the death of or divorce from a former husband, and a child is born that might have been the child of either.

5. Where a woman is suspected of trying to palm off a child on her husband to which she has never given birth.

Ques. What questions should be considered in the examination?

Ans. 1. Has this woman recently given birth to a child, or has she at any time borne children?

2. Is her age and physical condition such as might be consistent with having given birth to this particular child?

3. Could a man, so old and feeble as the husband, have been likely to have been the father of a child?

4. Does the child resemble the supposed father?

5. Does the size, weight and development of the child agree with the supposed period of gestation?

6. What was the period of gestation inferred from the size and development of the child?

7. Is the case one of superfoetation or superfecundation?

8. Were both children conceived from a single coitus?

Ques. What is meant by a suit for affiliation?

Ans. It is a suit brought by the mother of an illegitimate child to force the father of the child to contribute to its support.

Ques. What is the nature of her evidence?

Ans. Her evidence is such as will tend to establish the paternity of the child. It consists of the following:

A. Proof of intercourse at about the natural period of her conception.

B. Proof offered as to the resemblance of the child to the putative father.

Ques. What is the nature of the defence in such a suit?

Ans. 1. The denial of intercourse.

2. The proof that the woman had intercourse with two or more men at or about the same time.

3. The proof tending to establish the impotency or sterility of the defendant.

4. The denial of likeness of the child to defendant.

Ques. What points are of medico legal interest in connection with the subject of paternity?

Ans. 1. The law does not permit married persons to give evidence against the legitimacy of the children born in lawful wedlock between them.

2. Where a woman is shown to have had intercourse with two men within a few days of each other, at or about the period of her conception, the law will not pretend to establish the parentage of the child, unless the parental likeness is strong.

3. Where a woman living with her husband and supposedly cohabiting with him, yet at the same time a well known adulteress, gives birth to a child, the law considers the child legitimate, unless very strong proofs of likeness to the paramour are brought forward, such as race or personal deformity.

4. Some women pretend to have certain sensations during a fruitful intercourse, different from that experienced at ordinary indulgence. While this may be very strong proof to the woman herself, it is entirely valueless in a court of law. The woman is likely to swear to having experienced these peculiar sensations while having intercourse with the most wealthy and good looking of her several lovers.

5. The simple non-likeness to the husband would not be allowed as evidence against his paternity to a child born of his wife.

6. Maternal impressions during the early months of pregnancy are believed by many

to frequently mark children to a resemblance to these impressions. Thus it is claimed that a woman at about the sixth week of pregnancy, being frightened by a deformed negro, might give birth to a child bearing many characteristics of the negro

race. There is very little evidence other than coincidence to establish the fact of maternal impressions having any such power, and most deformities are easily shown to be variations of development, with which impressions have nothing to do.

CHAPTER XXVI.

ABORTION, MISCARRIAGES AND PREMATURE LABOR.

Question. What is abortion, legally speaking?

Answer. Inducing the expulsion of the ovum before the normal termination of the period of gestation.

Ques. What is abortion, medically speaking?

Ans. The expulsion of the ovum from any cause before the appearance of quickening, which takes place about the end of the fourth month.

Ques. What is a miscarriage, medically speaking?

Ans. The expulsion of the foetus from any cause during the time intervening between the appearance of quickening and the age of earliest viability, that is between the fourth and sixth month.

Ques. What is a premature labor, medically speaking?

Ans. The expulsion of the child from any cause during the period which intervenes between the age of earliest viability and the normal time of parturition.

Ques. What is the contents of the uterus called during these different periods of pregnancy?

Ans. During the first period it is called an embryo, during the second period a foetus, during the third period a child.

Ques. What are the statutes which generally regulate the crime of abortion?

Ans. 1. Any woman who shall take any poison or any noxious thing, or use any instrument with intent to produce on herself a miscarriage, abortion, or premature labor, is guilty of a felony. This law implicates the woman.

2. Whosoever shall administer or cause to be administered to any woman any poison or noxious substance, or shall employ any instrument or any other means whatsoever, with intent to produce an abortion, miscarriage, or premature labor upon her, is guilty of felony. This law implicates the physician or other person that induces an abortion, and also the man that employs the physician.

3. Whosoever supplies to any woman or any other person any drug, or any instrument or other means whatsoever, knowing that it was to be used with intent to produce abortion, is guilty of misdemeanor. This law implicates the druggist or instrument maker, who advertises and sells the means of abortion.

Ques. What points in relation to these statutes are worthy of note?

Ans. 1. It makes no difference whether the woman is with child or not.

2. It makes no difference whether abortion was actually induced or not.

3. It makes no difference whether quickening had actually taken place or not.

4. It makes no difference whether any permanent injury was caused to the woman or not.

5. If the woman dies from the effect of induced abortion, the crime is equivalent to murder.

6. It makes no difference whether the means used were instrumental or chemical.

7. It makes no difference whether the means used were supposed to have been dangerous or not.

8. The crime of abortion is a secret one, and hence the testimony of the woman, who is necessarily an accomplice, should not be taken without corroboration of every circumstance, as against the physician who is accused of performing the operation.

9. Neither should the evidence of the abortion monger be taken unsupported as against the woman. Both are equally guilty and both should be looked upon as competent witnesses and both ought to be supported by every circumstance.

Ques. Into what two classes may abortions be divided for purposes of study?

Ans. 1. Abortions due to natural causes.
2. Induced abortions.

Ques. Into what two classes may abortion due to natural causes be divided?

Ans. A. Those due to death of the child.
B. Those due to disease of the mother.

Ques. What causes tend to produce the death of the child?

Ans. 1. Disease of the membranes.

A. Fatty degeneration.

B. Hydatidiform degeneration.

C. Inflammation.

D. Apoplexy.

E. Syphilitic deposit.

F. Tuberculous deposit.

2. Disease of embryo.

A. Malformation.

B. Inflammation of the rudimentary organs.

C. Twisting or knots in the cord.

D. Incapacity of placenta to nourish the child.

Ques. What diseases of the mother tend to produce abortion?

Ans. 1. Abortion due to uterine disease—

- A. Fibroid tumors.
- B. Polypi.
- C. Inflammation.
- D. Hypertrophy.
- E. Displacements, such as retroversion,

procedentia, prolapse.

F. Tumors pressing on the uterus.

2. Abortion due to nervous diseases—

- A. Convulsions.
- B. Chorea.
- C. Reflex from obstinate vomiting.
- D. Mental shock.

3. Abortion from blood disease—

A. Anæmia from over-lactation or other cause.

B. Blood poisoning from kidney trouble or jaundice.

C. Thermic blood induced by high fevers.

4. Abortion due to venereal disease—

Ques. Into what classes may induced abortion be divided?

Ans.

A. Accidental abortion.

B. Criminal abortion.

Ques. What is the nature of the usual accidents that produce abortion?

Ans. a. The accidental ingestion of poisons, such as ergot in rye bread, lead in impure water, overdoses of purgative or emetic medicine, ptomaines which induce violent vomiting and purging.

b. Accidental falls and blows causing general violence to the body.

c. The introduction of instruments into the uterus and the application of other forms of treatment to that organ, under mistaken diagnosis as to the condition of pregnancy. There may be reckoned under this head a carelessness almost amounting to the criminal when these acts are performed by a physician.

d. Unusually violent or frequent sexual intercourse.

Ques. Into what classes may the causes of criminal abortion be divided?

Ans. a. Chemical.

b. Mechanical.

Ques. What drugs or chemicals have the general reputation of producing abortion?

Ans. 1. All the violent purgatives.

2. All the violent emetics.

3. Strong diuretics.

4. Extract of cottonwood.

5. Mercurial salts.

6. Rue.

7. Savin.

8. Ergot.

9. Cantharides.

10. Tansy.

11. Pennyroyal.

Ques. What mechanical means are employed for the production of abortion?

Ans. 1. Great external violence to the body, such as kicks and blows to the abdomen, falls from a height, jumping, etc.

2. The introduction or attempt at introduction of instruments into the uterine cavity. Almost every variety of instrument has been used from the naked hand to an umbrellawire.

Ques. What are the dangers incurred in abortion?

Ans. 1. Dangers from hemorrhage. The uterus bleeds much more freely and its power of contraction is less than in labor at full term.

2. Dangers from the action of drugs on the system, as shown in the acute and chronic effect of poisons.

3. Dangers resulting from the use of dilating and puncturing instruments. This may be either on the uterus or surrounding tissues.

4. Blood poisoning from the following causes:

A. Absorption of septic matter from retained portions of the ovum or its membranes.

B. Septic infection from the instruments employed.

C. Septic infection from the hands of those who nursed and operated on the patient.

5. Dangers from subinvolution and the usual accidents of labor.

Ques. At what period of gestation is abortion attended with the most danger?

Ans. The later the abortion takes place, the more it resembles a labor at full term and the less danger will attend the delivery. The earlier the abortion, the more difficult will it be to extract the contents of the womb entire and the more danger will there be from want of contraction.

Ques. Under what circumstances does the legal investigation of a case of abortion take place?

Ans. 1. In a coroner's inquest, where a woman dies from the results of a criminal operation.

2. In the trial, where arrests take place under the statutes before mentioned.

3. In suits for malpractice, where a physician is charged with carelessly producing a miscarriage, through his manipulation in treating the patient.

4. Where the character of a woman is assailed by charging her with having procured an abortion on herself.

Ques. What are the questions which have to be determined in the investigation?

Ans. 1. Has the woman under consideration ever been pregnant?

2. Has the woman lately given birth to a child?

3. Is there any sign of violence on the exterior of the body?

4. Is there any sign of violence about the genital organs?

5. Is septic fever present or has the woman suffered from it at any time?

6. In the dead, are there any signs of the action of violent poisons?

7. On the dead, are there any signs of septic infection?

8. Has death resulted from injury to the genital organs produced by instruments usually employed in abortion?

9. What is the nature of the substance expelled from the uterus?

10. What sort of instruments or drugs were found in the possession of the accused?

11. Does the suspected woman, if living, show any signs of such disease as might naturally bring on a miscarriage?

12. Is there on the body of the woman, if dead, any appearance of disease that might account for a natural abortion?

13. Has death been caused by uterine hemorrhage?

14. If a child has been expelled, was it alive at the time and was it viable?

15. What period of gestation had it reached?

Ques. What points are of medico-legal interest concerning the subject of abortion generally?

Ans. 1. When women die during menstruation, the uterus may possess some of the appearances of abortion at an early term.

2. Peritonitis, when due to violence, is localized usually.

3. The post mortem signs of abortion in the dead body, before the third month, are very slight, after that time the location of the placenta may generally be detected on the inside of the uterus.

4. The amount of general violence to which a woman may be subjected at times without producing an abortion is almost incredible.

5. The small amount of violence necessary to cause miscarriage in some women, is proverbial.

6. If one week has elapsed since the alleged abortion took place, the results of examination are very uncertain and the proof mainly of a negative nature.

7. Abortion and prevented conception seem to be the peculiar crimes of this gener-

ation. One in seven pregnancies terminate in abortion.

8. It is a subject for wonder that so many women escape death from abortion, considering how frequent the crime is accomplished and the means by which it is accomplished.

9. The intent to produce abortion constitutes the crime and not the act itself.

10. When persons call upon a physician, soliciting his aid in the production of an abortion, it is proper for him to inform the authorities, but he is under no obligations to society to constitute himself a detective to procure evidence of such a crime.

Ques. What is meant by the term artificial abortion?

Ans. 1. When the operation is performed by a physician for the purpose of saving the life of the mother.

2. When premature labor is brought on for the purpose of saving the life of a child, when a child at full term could not be safely delivered.

Ques. What conditions of the mother would warrant an abortion?

Ans. 1. Persistent vomiting of pregnancy, where the woman was dying from inanition.

2. Chorea of a violent nature.

3. Convulsions due to severe kidney difficulty.

4. Pernicious anaemia.

Ques. What conditions of the mother would necessitate such an operation for the safe delivery of a child?

Ans. 1. Deformity of the bony pelvis, narrowing the canal.

2. The presence of tumors blocking up the canal.

Ques. What rules should govern practitioners in such operations?

Ans. 1. Consent of the woman and her husband should be secured in writing.

2. The necessity for the operation should be agreed on, at a consultation of at least three competent physicians.

3. The operation should yield a reasonable hope of success in attaining the object for which it is performed.

4. The operation should be performed under the strictest aseptic precautions.

CHAPTER XXVII.

RAPE, INDECENT ASSAULT. AGE OF CONSENT.

Question. What is Rape?

Answer. Rape is the carnal knowledge of a woman, by force, and against her will.

Ques. What constitutes carnal knowledge, within the meaning of the statute?

Ans. There must be proved some degree of penetration. The slightest touch of the penis to the vulva is sufficient, though the crime is easier proved if injuries are produced and the penetration is complete.

Ques. What constitutes force within the meaning of the law?

Ans. The woman is expected to make all the resistance in her power.

Ques. What constitutes consent?

Ans. 1. The woman or female child must be of sufficient age to give consent. This age differs in different States with a great deal of foolishness, for in many cases the age of consent is placed lower than the age at

which a woman is allowed to assume the marriage contract. It would seem that a woman would require about as much knowledge of the ways of the world to thoroughly appreciate the consequences of consenting to illicit sexual intercourse as she would to appreciate the responsibilities of matrimony.

2. The woman must be in possession of her sound senses at the time and not stupefied by narcotics or alcohol or her natural passions stimulated by drugs, administered by the person accused of raping her.

3. Where the consent is obtained, by fraudulently leading a woman to believe the man having intercourse with her is her husband, there is no consent on her part within the meaning of the law.

Ques. What is the meaning of the term Indecent Assault?

Ans. Indecent Assault is an attempt to commit rape where penetration was not accomplished.

Ques. What bearing does the fact that the accuser in the case is a well known prostitute have upon the crime of rape.

Ans. No bearing at all upon the crime, but as the crime is nearly always a secret one, the woman is allowed to establish the proof by her own unsupported testimony. The accusation is one easily brought and somewhat hard to defend: for the same reason, therefore, the accused is allowed to show the previous reputation of the woman for the purpose of indicating her likelihood of consenting under ordinary circumstances to the act.

Ques. What questions are of especial medico-legal interest in the discussion of the subject of rape?

Ans. 1. Can a female of adult age and ordinary strength be violated by one man, without consent?

2. Can a female be violated, without her knowledge, during natural sleep?

3. To what extent does the law protect the chastity of the idiotic, the insane and the subject of nervous disease?

4. Can a woman be violated without her knowledge while intoxicated?

Ques. Under what circumstances may the first question be answered in the affirmative?

Ans. A. By deception, as in personating the woman's husband.

B. By violence, rendering the woman insensible.

C. By drugging the woman.

D. By intimidation, the woman thinking herself in danger of her life.

E. Occasionally by attacking the woman unawares.

Ques. Under what circumstances may the second question be answered in the affirmative?

Ans. The definition of rape does not call for complete penetration, so it may be possible in a case, where the woman sleeps

very sound, that a man might touch the vagina of the woman with his penis and yet not wake her. In this way penetration, within the meaning of the law, might be accomplished before the woman could have opportunity of resistance, but that a virgin should have been penetrated and fruitful intercourse taken place, during natural sleep, is entirely out of the question. "Not every person sleeps who keeps their eyes shut."

Ques. What points are of interest in answering the third question?

Ans. A. Nymphomania would not in any way excuse consent.

B. Intercourse with an idiot of modest habits might not constitute rape, but the mind should be strong enough on such points to know some of the consequences of the act.

C. Intercourse with an insane woman of modest habits would be looked upon in the same way as the intercourse with idiotic women.

D. It is a punishable offense in the State of Connecticut to have intercourse with such a woman, either with or without consent, or even marriage.

Ques. What can be said in answer to the fourth question?

Ans. This would depend somewhat upon the degree of intoxication. In the case of a well known lewd woman, such a claim would not be considered, but in the case of an hitherto modest girl, where the intoxication was procured by the accused, it would most likely be construed as rape.

Ques. In the case of the rape of a child, where would marks of violence most likely be found?

Ans. The marks of violence would be produced in the introduction of the large male organ into a small vagina and the lesions would be such as might be thus caused. The child making no resistance, no marks of a struggle would be visible.

Ques. In the case of the rape of an adult virgin, where would marks of violence most likely be found?

Ans. The adult woman would be supposed to be capable of considerable resistance and would be likely to bear the marks of a struggle. The vagina being penetrated for the first time in a violent manner would also bear marks of force thus used. Rupture of the perineum would be almost surely present, though not deeply, and rupture of the hymen must invariably be present if complete penetration took place.

Ques. In case of the rape of a married adult or an adult woman used to frequent intercourse, where would marks of violence be found?

Ans. The woman would be expected to make all possible resistance, and in so doing marks of violence common to a struggle would be in evidence, but the vagina being

dilated already, would not show much effect from penetration.

Ques. What points should be noted in making an examination of a woman or female child, with the intent to form an opinion as to whether she had been raped or not?

Ans. 1. Note the time of day and the date when called.

2. At exactly what time did the supposed assault take place?

3. The apparent age of the female supposed to have been raped.

4. Size, weight, the state of health and strength of the assaulted.

5. Mental condition of the assaulted.

6. Condition of clothing.

A. Clean and orderly.

B. Rent and soiled.

C. Stains of blood or seminal fluid.

7. Condition of body aside from the genitals.

A. Sound and healthy.

B. Scratches and bruises.

8. Condition of genitals.

A. Rupture either anterior or posterior.

B. Difficulty of separating thighs.

C. Hemorrhage.

D. Purulent discharge, containing gonococci.

E. Purulent discharge not containing gonococci.

F. Presence of ulceration, either syphilitic or chancreoidal.

9. Note the story of the assaulted female, alone and apart from her parents or guardians.

10. Note the story of the parents and guardians, apart from the complainant.

11. Make careful examination of the locality where the supposed assault took place and note appearances of a struggle.

Ques. What further points are of medico-legal interest in connection with the subject of rape.

Ans. 1. The hands, throat, chest, front of thighs, shins, etc., are the place to look for marks of a struggle in case of rape.

2. Discharges from the vagina are in no case proof of rape, for they may be due to uncleanness and bad hygienic surroundings and even if specific, may be acquired other than by violence of the rape nature.

3. Parents and guardians frequently attempt to extort blackmail by accusations of rape, on behalf of the children placed in their charge and it is not surprising to find such children completely coached in the part they are to play in the verbal examination.

4. It may be found on examination that the child has without doubt been raped, but not by the accused. In such a case the presence of a gonorrhoeal discharge in the one and none in the other would be an important point.

5. It is a superstition among certain ignorant persons that intercourse with a virgin will cure venereal disease, and so in or-

der to be perfectly sure that they obtain a virgin they attack a very young child for their assault. This has been frequently heard of among the ignorant Irish.

6. Many cases of rape are the result of sadism. The perpetrators of the crime not being altogether responsible for their acts. In these cases murder is a frequent accompaniment.

7. As pregnancy has nothing to do with volition, it is quite possible that pregnancy may follow rape. This is not infrequently the real reason of a complaint being brought. If no damage of this sort has been caused, the woman had generally rather keep the matter quiet than to advertise her own ruin in a public trial.

8. It is also possible that death may follow violent intercourse, especially on children, both through the injury done the sexual organs and the fright occasioned by the attack.

9. The only proof of a seminal stain is the discovery of the spermatozoa. These stains should be dissolved in tepid water by allowing the cloth to soak in it, and the fluid examined carefully with the microscope. The evidence does not prove rape or innocence unless actually found in the genital passages of a child, but is of importance in a corroborative way.

10. Occasionally suits have been brought against females for rape on young boys. This is also a punishable offense. It generally occurs in cases where the female is, through some malformation, incapable of intercourse with a grown man.

11. If the alleged rape took place in a locality where ordinary sounds might be heard by other people and the female made no outcry, the probability of consent is greatly increased.

12. Impotence is one of the most frequent defenses to charges of rape and should be taken with a good deal of reservation, especially where the subject of the rape is an infant, for it is usually men who are impotent to ordinary intercourse that undertake these crimes.

13. The case of a woman is prejudiced very much by not making an accusation against her violator at once, upon her escape. If she waits many days all the evidence of violence will disappear.

14. Where great bodily injury is found, it is altogether unlikely that the woman consented to it, although she may have been a well known prostitute and under ordinary circumstances not opposed to the act of coition with any man.

15. Where the disproportion of strength is great, as in cases where the rapist had plenty of assistants, the female may be held so securely that no marks of violence can be found upon her. Such also may be the case where narcotics are employed.

16. Where aphrodisiacs are employed,

and in this way the woman unnaturally excited to sexual desire and her intelligent capability of consent destroyed, intercourse may constitute rape.

17. Intercourse with a woman under the age of consent constitutes rape, even though the girl solicit the intercourse.

CHAPTER XXVIII.

UNNATURAL SEXUAL CRIMES.

Question. What are the most common forms of unnatural sexual crimes?

- Ans. 1. Sodomy.
2. Pederasty.
3. Tribadism.
4. Bestiality.
5. Incest.
6. Indecent Exposure.
7. Cunni-lingus.
8. Fellare.
9. Necrophilia.

Ques. How are these defined?

Ans. 1. Sodomy is intercourse of man with man, the anus being used in place of the vagina of the woman.

2. Pederasty is intercourse of a man with a boy, the anus being used as in sodomy.

3. Tribadism is intercourse of a woman with a woman, orgasm being accomplished by friction of the genitals.

4. Bestiality is intercourse of a man or a woman with one of the lower animals.

5. Incest is intercourse between persons related within the bonds of consanguinity forbidden to marriage, as between parents and children, brother and sister.

6. Indecent exposure has reference to the open exposure of the genitals in public places.

7. Cunni-lingus is intercourse with a woman, the tongue being used in place of the penis.

8. Fellare is intercourse where the mouth is used in place of the vagina.

9. Necrophilia is intercourse with the dead.

Ques. Under what two classes may all of these crimes be arranged for purpose of study?

- Ans. 1. Those due to sexual perversion. (See Chapter on Psychopathia-Sexualis.)
2. Those due to pure sexual perversity.

Ques. Under what circumstances are the immoral habits alluded to under sexual perversity acquired?

Ans. 1. They are frequently persons rendered impotent by masturbation or excessive venery in ordinary intercourse.

2. Sensual people confined in prisons, or sailors on shipboard.

3. Soldiers in garrison, living in idleness,

little to do and nothing to think about and with pay too small for them to indulge in prostitution.

4. Boys and girls in the country, where they are unable to indulge their sexual propensities in the ordinary manner.

5. Girls in boarding schools for the same reason.

6. Nuns in convents for the same reason.

7. Theological students in college, afraid to exhibit their immorality by frequenting houses of prostitution.

8. One characteristic is always exhibited, they commit these crimes for want of a better way of satisfying their normal sexual appetites and return at once to the normal method when opportunity is allowed.

Ques. What points in relation to unnatural sexual crimes are of medico-legal interest?

Ans. 1. These crimes as a rule do not depend for their proof on medical testimony, but are proven in other ways.

2. If both the active and passive agent in these crimes are adult, both are held equally guilty; but if one is a child, the offense is equivalent to rape on a child under the age of consent.

3. In old times these crimes were considered as very atrocious and were punishable by death, but in recent years the penalties have been greatly reduced, the crime now being punishable as a misdemeanor.

4. Those who are habituated to these unnatural acts are said to acquire certain malformation of the parts used, so that they may be distinguished. This is not true to so great an extent, as all the abnormalities named may be occasioned by other causes.

5. In the large proportion of cases, mental responsibility may be fairly questioned. This point should receive great attention.

6. Most of these crimes have been at one time or another indulged, as an act of religious worship, and are exceedingly common in history, about two thousand years ago.

7. These crimes are especially common among the idle and dissolute nobility of Europe at the present day.

8. Heredity plays a very important part in their causation.

CHAPTER XXIX.

PROSTITUTION AND VENEREAL DISEASE.

Question. In what ways does the law take notice of prostitution and venereal disease?

Answer. 1. By statutes framed with the intention of restraining and preventing immoral conduct.

2. By statutes forbidding the seduction and enticement of women under age to lives of prostitution.

3. By statutes forbidding the keeping of houses of prostitution.

4. By statutes prohibiting houses of prostitution in the neighborhood of places of public worship, schools, etc., and of running such houses in connection with saloons, restaurants, theaters, and other places of public amusement and resort.

5. By statutes endeavoring to prevent the spread of venereal disease. This comprises laws restricting such houses to certain localities of a city or town, and compelling frequent medical inspections, etc.

6. Through the bearing the communication of such disease may have upon divorce.

7. Through the bearing such an occupation may have upon the testimony of a woman claiming to have been raped.

8. Through the bearing such an occupation may have upon the general character of a person for honesty or veracity.

Ques. What three diseases are usually considered as venereal?

Ans. 1. Gonorrhoea.

2. Chancroidal ulcers.

3. Syphilis.

Ques. What points are important respecting the diagnosis of these diseases?

Ans. 1. Gonorrhoea is always accompanied by a purulent discharge from the mucous membrane of the genital passages, which contains a specific germ known as the gonococcus, which may be discovered by microscopic examination. This is pathognomonic of this disease and separates it distinctly from all others.

Ques. What is the main affection from which gonorrhoea has to be diagnosed?

Ans. From simple urethritis in the male and from leucorrhoea in the female.

2. Chancroidal ulcers are painful, spreading, eating ulcers, secreting specific and auto-innoculable pus and are accompanied by suppurating inguinal glands. Their period of incubation is short and they do not effect the general system otherwise than by the pain and fever which is due to the absorption of pus from the abscesses in the groins.

They are easily cured by disinfection or cauterization and by evacuating the pus from the abscesses and enucleating the inguinal glands which have become infected.

3. Syphilis is a systemic disease, having a considerable period of incubation, a period

of local infection, a period of secondary eruption on the skin, and a period accompanied by diseased bones and a general deposit of syphilitic material throughout the tissues of the body. The disease lasts probably through life and descends by heredity.

Ques. What fact is of the greatest legal importance in connection with these diseases?

Ans. They may be communicated by other means than by sexual intercourse.

Ques. What means are prominent under this head?

Ans. 1. The communication of gonorrhoea by use of sponges and towels recently used by those already infected is quite frequent.

2. Gonorrhoeal ophthalmia is frequently communicated from the mother to the child during birth.

3. The chancroidal infection of warts and herpetic eruptions on the penis may take place from contact with chancroidal pus left on the seat of a water closet. The same infection may take place from wearing clothes previously the property of another.

4. Syphilis has been frequently communicated by kissing.

5. Syphilis has been communicated by nursing an infected child, and also given in this way from the nurse to the child.

6. Syphilis is frequently communicated by using a pipe formerly smoked by another.

7. Syphilis has been frequently communicated to physicians while dressing syphilitic sores, through the medium of cuts or wounds on the hands. In this way a physician has become infected while making a vaginal examination.

8. It is communicated through hereditary influence both from the father and the mother to the children.

Ques. What questions must be decided in making an examination of a suspected case of venereal disease for legal purposes?

Ans. 1. Is the person suffering from a venereal disease or from some other complaint?

2. How was this disease communicated to the person examined?

Ques. What points are of medico-legal importance in connection with the subject of prostitution and venereal disease?

Ans. 1. Prostitution has existed among every known people in every age.

2. Venereal disease has existed from the earliest times and is known among all peoples.

3. No law has ever been able to suppress either the one or the other.

4. The enforcement of such laws as may exist regulating prostitution is generally left to the discretion of the police power, and this power is usually abused by the police

and employed as a means of extorting money from those engaged in the occupation.

5. The previous existence of gonorrhoea has a great bearing upon the question of impotence and sterility, both on the part of the male and the female. In the former it causes strictures and occlusions of the seminal passages, and in the latter endometritis and salpingitis.

6. Physicians are frequently consulted as to whether it would be wise to marry, the consultant previously having suffered from venereal disease. The responsibility in such cases is very great and the warning should be given when the slightest sign of disease remains.

7. Treatment has a great influence on syphilis, as regards its likelihood of transmission to offspring.

8. It is possible that a husband may become acclimated to a constant discharge from the genital passages of his wife, so as never to be infected by it, while another poaching on his ground might become diseased at once.

9. The presence of a urethral discharge from a woman is almost invariably a sign of infective gonorrhoea, as no other disease is likely to cause it.

10. The presence of the gonococcus is positive proof of the disease that bears its

name, but the absence of this germ at any particular time in any person suffering from a chronic discharge is not positive proof that the discharge is innocent.

11. A man having a slight discharge may indulge frequently in intercourse and his partner experience no ill effects, but if the man becomes excited by prolonged drinking or becomes immoderate in his attempts at coition, this discharge may become again infective.

12. A man may have had syphilis and apparently recovered, he may marry and his wife remains healthy, until children are born, when she may go through all the stages of the disease, as also may the child, seeming to show that the syphilis was conveyed first to the child by the father and from the child to the mother.

13. Repeated abortions are a very striking result and sign of existing syphilis, even though no other symptoms are present.

14. Syphilis is no respecter of persons and visits the rich as well as the poor, and may show a great many unhappy surprises. All investigations ought to be carefully made. It may have originated in the woman, as well as the man, so that the physician must not be blinded by apparent virtue, nor make accusations against anyone without the best foundation.

CHAPTER XXX.

LIVE BIRTH, INFANTICIDE BABY FARMING.

Question. What is meant by the crime infanticide?

Answer. The killing of a new born child. The crime is equivalent to murder.

Ques. When is a child legally said to have been born alive?

Ans. When it shows signs of life after having been completely separated from the mother. The body of the child being entirely outside the maternal genital passages. The cord may be still attached.

Ques. When is a child said to be still born?

Ans. When the death of the child takes place either previous to or during birth.

Ques. What is the main motive for the crime of infanticide?

Ans. 1. The getting rid of an illegitimate child, thus preserving the reputation of the mother for chastity.

2. To avoid the trouble and expense incident upon the support of children to those having them in charge.

Ques. What is the usual defence to an accusation of infanticide?

Ans. That the child in question was still born.

Ques. Upon what proof is the crime of infanticide established?

Ans. 1. Upon proof of recent delivery and attempted concealment of the child.

2. Upon proof that the mother, knowing

her approaching confinement, had made no preparation for the care of her child.

3. Upon demonstration of marks of violence upon the body of a dead child.

4. Upon proof of live birth.

5. Upon proof of neglect in furnishing the child with proper care, warmth and food.

Ques. What evidence is used to establish live birth?

Ans. 1. The proof of the establishment of respiration.

2. The proof that the child had taken food.

3. The proof that the heart had undergone the changes necessary to extra uterine life, the closure of the foramen ovale.

4. The absence of meconium from the intestines.

5. The decay and detachment of the cord and the healing of the umbilicus.

6. The size and growth of the child.

Ques. Upon what is the proof of the establishment of respiration based?

Ans. Lungs that have breathed and become fully inflated will always float on water, even though cut in little pieces. Lungs that have never been inflated will sink in water, unless the gases of putrefaction have developed, which may cause them to float.

Ques. Live birth having been proved to a

moral certainty, how can we form an opinion as to how long the child had lived?

Ans. 1. If the child lived fifteen minutes the stomach would contain frothy fluid and there would be clots formed in the umbilical vessels.

2. If the child lived twenty-four hours there would be contraction and thickening of the umbilical vessel coats, near the umbilicus.

3. If the child lived two days, there would be contraction through the whole extent of the umbilical arteries. The epidermis begins to exfoliate.

4. If the child lived three days there is beginning contraction in the umbilical veins. The cord begins to dry, the red inflamed ring is formed and there is a slight purulent discharge at the point of ultimate separation.

5. The cord usually separates on the fourth day.

6. If the child is five days old, the contraction in the umbilical veins is complete.

7. If the child has lived seven days, the ductus arteriosus is contracted to the size of a crow quill.

8. If the child is ten days old, the foetal openings in the heart have entirely closed up and the ductus arteriosus is obliterated.

9. If the umbilicus is entirely healed, the child is likely about twenty days old.

Ques. What are the usual causes of death in still born children at or about the termination of gestation at its normal period.

Ans. 1. First labors show more still births than occur afterwards, on account of longer duration of parturition.

2. Many more male children are still born than female children.

3. Unusually large size of the head, rendering labors tedious.

4. Inherited disease, such as syphilis.

5. Congenital malformations.

6. Placenta previa.

7. Prolapse of the cord.

8. Footling and breech presentation.

9. Forceps delivery, causing injury to head, very rare.

10. Premature separation of placenta from blows on the abdomen.

11. Drowning in the blood and liquor amnii in the bed before the child is entirely separate from the mother.

Ques. What means are usually used for the destruction of a child in cases of infanticide?

Ans. 1. Smothering.

2. Strangulation.

3. Drowning.

4. Stabbing the brain with needles.

5. Occasionally by mutilation, such as decapitation.

6. Most frequently by starvation, cold and general neglect. This latter is the rule in cases of so-called baby farmers.

Ques. What points are of medico-legal in-

terest in connection with the subject of infanticide?

Ans. 1. It is possible that a woman may be unaware of her pregnancy in the earlier months, but it is very unlikely that she should not know her condition in the later months.

2. A woman may claim that she was unaware that she was in labor and that the child's death was caused by accidentally falling into the water of a chamber, or into a water closet vault, or onto the floor. In these cases, it is well to remember that the cord is likely to be broken and torn off, instead of cut and tied, as is the ordinary way.

3. Unconscious delivery may take place when the woman is under an anaesthetic, and it has been said to occur occasionally when the woman was in a very deep lethargic sleep. In such a case, the woman may not render such attention as may be necessary to save the child's life.

4. In testing the lungs to ascertain if they will float, it is well to remember that the lungs may have been inflated by artificial respiration after the death of the child, but in this case there could be no guilt, as the act is an endeavor to save the child.

5. A child may be starved by giving it improper food, just as well as by not giving it any food.

6. In children born dead there will be no accumulation of air in the stomach and intestines, and if these organs be carefully tied and removed, they will sink in water.

7. It is possible for a child to breathe before it is entirely born; in such a case, the proof of respiration would not be proof of legal live birth.

8. If the child had been feloniously drowned, the water and other substances in which it was submerged may be found in the stomach.

9. When a young infant is found dead, the burden of proof is on the prosecution to show that it was born living. The law presumes, unless proof to the contrary is presented, that it was still born.

10. The great object in proving that a child was born alive is derived from the fact that a husband only acquires tenancy by courtesy in his wife's estate when he has had living issue by her.

11. A child born alive, though not capable of prolonged existence, may inherit and transmit property.

12. The concealment of the birth of a child and the hiding of the dead body of a still born child is in some countries a criminal offense in itself.

13. Cases are related where uterine respiration and even crying took place.

14. There are cases recorded where children newly born have survived the most wonderful exposure, yet were found alive. A new born child is very hard to kill.

15. A child may show some movements indicating life and yet never have breathed.

16. Some physicians have claimed that a child may bleed to death from neglecting to tie the cord. While this is usually done, there are exceedingly few cases on record where accident has resulted from its neglect.

17. It is impossible that a woman should be delivered while standing perfectly erect.

18. Fractures of the child's skull may take place from blows on the mother's abdomen before labor sets in.

CHAPTER XXXI.

MENTAL JURISPRUDENCE.

THE HUMAN MIND IN HEALTH AND DISEASE.

Question. What two subjects does the study of the mind embrace?

Answer. 1. The study of man as a complicated machine, a maternal body, with different organs, suited to different purposes.

2. The study of man as a force, a motive power, making itself manifest and operating through the body, and producing psychic phenomena.

Ques. Why does Medical Jurisprudence take cognizance of these subjects?

Ans. Upon these facts rests the great question of responsibility for acts performed. It is necessary for a person to understand the proper working of a machine, when in good order, if he would understand the reasons for its faulty work when in bad order. It is also necessary to know the proper working and faculties of the mind in health, in order to understand the deviations from the normal state, under the influence of disease.

Ques. What two medical sciences treat of man in a state of health?

Ans. Anatomy and Physiology.

Ques. How are these defined?

Ans. 1. Anatomy treats of the material body and tells how it is constructed.

2. Physiology treats of the motive power and the manner of its operation.

Ques. What is that branch of physiology called that treats of those phenomena usually designated as the mind?

Ans. Psychology or Mental Philosophy.

Ques. What two medical sciences treat of man in a state of disease?

Ans. Morbid Anatomy and Pathology.

Ques. How are these defined?

Ans. 1. Morbid Anatomy treats of the changes which the body undergoes from the effects of disease.

2. Pathology treats of the abnormal action, in the motive power, in disease.

Ques. What is that branch of Pathology called which treats of those abnormal manifestations and phenomena which are exhibited by the mind in a state of disease?

Ans. Insanity or Morbid Psychology.

Ques. What facts in Anatomy and Physiology have a bearing upon the study of Psychic Phenomena?

Ans. 1. The fact that the body is ultimately composed of cells, each having a separate, individual life of its own.

2. That these cells assemble and are unit-

ed in systems under laws closely resembling the laws of division of labor.

3. That each cell has all the functions, less perfectly developed, that the entire body possesses.

4. That sensation is the process through which the motive power takes cognizance of the state of the body.

5. That perception is the process by which the motive power takes cognizance of the outer world, usually through certain systems of the body.

6. That the functions of the different systems of the body are adapted to the uses of the motive power for the purpose of the body's growth, development, repair, preservation and reproduction.

Ques. What four important propositions may be deduced from these facts?

Ans. 1. When the Anatomy is normal the action of the motive power will be Physiological.

2. When the Anatomy is morbid, the action of the motive power will be Pathological.

3. So long as the motive power is Physiological it will tend to preserve the body in a normal anatomical condition against all causes of disease originating within itself and tend to restore the body to a normal anatomical condition when abnormal, thus acting as the healing force of nature.

4. When the action of the motive power is Pathological, it will neglect its duties of preserving and healing the body, so that the anatomical state will soon become morbid.

Ques. What do these facts and deductions prove in relation to mental philosophy and insanity?

Ans. 1. Morbid anatomy is practically never known without some abnormal manifestation of the motive power, either pain, disturbance of function, anaesthesia, paralysis or morbid psychology, depending upon the location and severity of the lesion.

2. Insanity is always accompanied by morbid anatomy, either in the organs peculiarly set apart for the use of the motive power, such as the brain, or somewhere in the body. There are also generally observed, at the same time, other pathological conditions.

Ques. Into what systems or functions are the cells of the body assembled?

Ans. 1. The telegraphic and communi-

cative, for conducting information between different parts of the body and the brain, or the organ especially adapted to the use of the motive power.

Ques. Into what two different branches is this system divided?

Ans. A. Ganglia or Batteries.

B. Nerves or Conducting Wires.

Ques. How are the Ganglia classified as regards their special function?

Ans. a. The Sympathetic, which controls the nutrition of the body.

b. The Cerebral, which are the seat of motion, sensation, perception, memory, intellect, emotion and will.

c. The Cerebellar, which serve as a grand exchange office, thus enabling two or more of the different systems to act in unison.

d. The Medulla Oblongata, which is the seat of the vital centers, or those directly controlling the action of the heart and lungs.

e. The Spinal Cord, which is the seat of the reflex centers, so called.

Ques. How are the nerves classified as regards special function?

Ans. a. Afferent, or nerves of sensation.

b. Efferent, or nerves of motion.

2. Circulatory System for transportation of nutriment to the cells throughout all the different systems of the body.

Ques. How are the organs and tissues which compose the Circulatory system classified?

Ans. A. The Blood, or circulating medium, composed of cells, floating in a liquid menstrum.

B. The Heart, or pump for forcing the blood around the body.

C. The Veins, or afferent vessels conveying the blood to the heart.

D. The Arteries, or afferent vessels conveying the blood from the heart towards the tissues of the body.

E. Capillaries, or very small vessels connecting the Arteries with the Veins at their most minute division.

3. The Excretory System, for removing the debris resulting from the action of the body and the death of the cells.

Ques. What organs perform this work?

Ans. A. The Kidneys.

B. The Lymphatics.

C. The Lungs.

D. The Skin.

E. The Liver.

F. The Intestines.

4. A Digestive System for preparing nutriment for use in the body so that it may circulate freely in the blood.

Ques. What organs perform this function?

Ans. A. The Teeth.

B. The Salivary Glands.

C. The Stomach and its Glands.

D. The Intestines and their Glands, such as the Pancreas.

E. The Liver.

F. The Spleen.

5. A Respiratory System to enable the blood to come in contact with the oxygen of the air. This oxygen is necessary for the chemical operations that are carried on in the body.

Ques. What organs perform this function?

Ans. A. The Placenta in the foetus.

B. The Lungs in the adult.

C. The Larynx, Trachea and Bronchi for transmitting the air to the lungs.

6. A Mechanical System for acquiring food and protecting the body.

Ques. What organs perform this function?

Ans. A. The bones arranged in the frame.

B. The Muscles for motion.

7. The Reproductive System by which the entire individual is reproduced and the race perpetuated.

Ques. What kinds of reproduction are there?

Ans. A. Reproduction by Gemmation or budding, where the cell sends out buds, which eventually become detached, forming new individuals.

B. Reproduction by means of the union of two cells of different sexes to form one cell, which subsequently divides and subdivides to form a new individual.

C. Reproduction by means of the subdivision of the nuclei of a cell, thus forming a number of cells inside a parent cell, which are subsequently set free by the breaking and destruction of the parent cell.

Ques. What forms are prominent in the reproduction of the human body?

Ans. The last in the formation of the spermatozoa which unite with the ova cell, which subsequently divides and subdivides after the manner suggested in the second.

Ques. What organs perform this function in the female?

Ans. a. The Ovaries.

b. The Fallopian Tubes.

c. The Uterus.

d. The Vagina.

e. The Clitoris.

f. The Breasts.

Ques. What organs perform this function in the male?

Ans. a. The Testicles.

b. The Spermatie Tubes and Vesicles.

c. The Urethra.

d. The Prostate.

e. The Penis.

8. A system arranged for the articulation of speech, so as to facilitate communication by means of spoken language.

Ques. What organs perform this function?

Ans. A. The lungs, bronchi and trachea, for conveying the air to and compressing it against the vocal cords.

B. The larynx, arranged with vocal cords and muscular apparatus for making them tense, so as to permit the vibration which causes sound.

C. The fauces, tongue, lips, teeth and palate for modulating these sounds, so as to form words and musical tones.

9. The organs of special sense, by which the perceptive faculties of the mind gain cognizance of external objects and forces.

Ques. How are the perceptions classified?

Ans. A. Hearing by means of an auditory apparatus, of which the ear is the principal organ.

Ques. What is perceived by the sense of hearing?

Ans. a. The identity of sound.

b. The location.

c. The distance, near or far.

d. The volume of a sound, the strength of the vibrations.

e. The pitch or relative number of vibrations.

B. Sight, of which the eye is the principal organ.

Ques. What is perceived by sight?

Ans. a. The identity of an object.

b. The shape of an object.

c. The surface, rough or smooth.

d. The color.

e. The shade, light or dark.

Ques. How are colors classified?

Ans. Into the primary colors, red, blue and yellow, and when broken up by the spectrum into the octave of colors, violet, indigo, blue, green, yellow, orange and red. These colors, combined in different proportions, form all the colors known.

f. The comparative size of the object, large or small.

g. The location.

h. The distance, near or far.

i. Motion, fast or slow.

C. Feeling, of which the touch corpuscles of the skin have the principle function. This sense acts by direct contact.

Ques. What may be perceived by feeling?

Ans. a. The identity of an object.

b. The surface, rough or smooth.

c. The shape, whether bounded by curved or straight lines, or by curved or pyramidal surfaces.

d. The temperature, hot or cold.

e. The adhesion, whether sticky or slippery.

f. The consistence, hard or soft, firm or yielding, solid, liquid or gas.

g. The size of an object.

h. The location, relative to other objects.

i. The distance relative to other objects.

j. Pain.

D. Smelling, of which the nose is the principal organ.

Ques. What may be perceived by smelling?

Ans. a. The fact of an odor.

b. The identity of an odor.

c. The location of an odor.

d. The intensity of an odor.

e. The purity of the atmosphere.

E. Tasting, of which the tongue and mouth are the principal organs.

Ques. What may be perceived by tasting?

Ans. a. The identity of the thing tasted.

b. Sweetness.

c. Sourness.

d. Bitterness.

e. Acridity.

f. Insipidity.

g. Pungency.

Ques. What is the object of the perceptions?

Ans. To enable the mind the more easily to procure those things which are necessary to the growth, preservation, repair and reproduction of the body and to satisfy those desires and cravings that take their origin in the mind itself.

Ques. What happens if by any accident the organ necessary to some special perception be destroyed?

Ans. An attempt is made to replace it by acuteness of some or all of the other faculties of perception.

Ques. What happens when a perception, congenitally absent, is created by treatment?

Ans. The person is at first unable to identify objects by it until the impression given by the new perception has been corroborated by those which before existed.

Ques. What happens when the sensation received by any of the organs of perception be greatly exaggerated?

Ans. The ordinary perception is lost and the sensation of pain substituted, in proportion.

Ques. How are the different faculties of the mind or motive power classified?

Ans. The subjective mind.

The objective mind.

CHAPTER XXXII.

THE OBJECTIVE MIND.

Question. What is meant by the objective mind?

Answer. It includes those mental phenomena which take place within the consciousness of the individual.

Ques. What are the characteristics of the objective mind?

Ans. 1. It operates through the body only.

2. It has its location in the brain.

3. It is created by education.

4. It matures in middle life.

5. It is weakened by bodily disease, especially by disease of the brain.

6. It may be developed in proportion to the normal development of the brain.

7. It is impaired in proportion to the destruction of the brain through injury or disease.

8. It is entirely absent at birth and in extreme old age, or the second childhood in cases of *uthanasia*.

Ques. What are the faculties of the objective mind?

Ans. 1. Perception, as described.

2. The acquired cravings.

3. Recollection.

4. Reasoning by comparison, induction deduction.

5. Emotions of approval or disapproval.

6. The power of choice or the will.

Ques. What are the characteristics of an acquired craving in distinction from an appetite?

Ans. A. It is impossible to satisfy them, for they increase in direct proportion to their gratification, while an appetite decreases in proportion to its gratification and when satisfied exists no longer.

B. If left unfed, they increase for a time only, and then gradually decrease until they become lost altogether, while an appetite continually increases if left unfed until destruction or grave injury to the body results.

C. Their gratification tends to the injury and disease of the body and final destruction of the objective mind, while the gratification of an appetite tends to the building up of the body its preservation, repair and reproduction.

D. They are constant, while appetites are periodic.

E. Their gratification is a continual danger to society and a troublesome menace to the public peace, while the proper gratification of natural appetites leads to peace and happiness and general content.

Ques. What are the principle acquired cravings?

Ans. A. The desire for the effect of narcotic drugs. This desire works great havoc,

both in body and mind, weakening the one and destroying the other.

B. The craving to carry the gratification of the natural appetites to excess. This is unimportant and is much more frequently the result of disease than the cause of it.

C. The craving for dress and display. This often becomes such a passion with people that they spend all their strength and money for the gratification of it, to the great injury of both mind and body.

D. The desire for romance reading. This is unimportant and is simply the excessive indulgence of the praiseworthy appetite for knowledge and is closely allied to the appetite for company. Yet some people have greatly weakened their minds in this way.

E. The craving to accumulate money for its own sake. The passion of the miser ends in mental degeneracy.

F. The desire for power over others. This often destroys the individual himself and leads to the disruption of society.

G. The desire for worship in an ostentatious manner. This passion has ruined many of the strongest minds and leads to fanaticism and religious persecution.

Ques. What is meant by the faculty of recollection?

Ans. It is the power of recalling to the mind past events by means of the association of ideas.

Ques. What is meant by the power of reasoning?

Ans. It is the power of foretelling events. That is, recollecting events that took place under certain circumstances in the past; a person may judge of what will happen under similar circumstances in the future. It is the power of predicting effects from causes.

Ques. What is the difference between inductive and deductive reasoning?

Ans. A. When reasoning by induction, a person accumulates a large number of similar facts and endeavors to so classify and group these facts as to establish a general law.

B. When reasoning by deduction, a person endeavors to solve problems by the application of some general law, as in mathematics.

Ques. What is meant by the emotion of approval or disapproval?

Ans. From early childhood people are educated to look upon certain acts as good, right and proper, and upon others as bad, wrong and improper. A person compares present events with the past and aligns them with those which he has been taught to think proper or with those which he has been taught to think improper. This faculty is by some called conscience.

Ques. Upon which one of the faculties of

the objective mind does responsibility for actions rest?

Ans. Upon the power of choice or the will.

Ques. How is the power of choice influenced?

Ans. By the other faculties of the objective mind in the following ways:

A. If the perceptions conveyed to the mind are incorrect, the reasoning based upon these perceptions will be faulty, the wrong emotions excited and choice influenced.

B. If recollections are incorrect, the same disturbance will follow.

C. If reasoning be faulty, improper predictions are likely to be made, wrong emotions excited and the power of choice influenced. In inductive reasoning, an insufficient number of facts may have been accumulated or the facts may not have been sufficiently alike to establish the rule sought, or a mistake may have been made in the application of a rule in deductive reasoning.

D. As emotion is the result of habit and education, the emotion excited in one person by a certain set of events may differ widely, and generally do so differ, and in this manner choice is influenced.

E. The power of choice is also influenced, as are all the other faculties of the objective mind, by the objective minds of other individuals, through suggestion.

Ques. What is the theory on which lawmakers justify punishment for disobedience of statutes?

Ans. A. The lawmakers take it for granted that the performance of certain acts is good and the performance of certain other acts is bad.

B. They frame statutes commanding those things which they think good and forbidding those which they think bad.

C. They wish to enforce on all men conformity to these laws.

D. They establish penalties for non-conformity, when they possess the power for enforcing these penalties.

E. They suppose if a person has correct perception to know what he is doing, correct recollection of the law, correct reasoning power to anticipate what will happen on disobedience, the same emotion as the framers of the law as to its propriety and the free power of choice, that he will absolutely obey the law as set down in the statute.

F. That the penalty prescribed will influence his choice to obey.

G. If the perceptions be incorrect, the recollection imperfect, the reason faulty, the emotion different from the framers of the law, or the power of choice influenced, the responsibility is more or less impaired, and on such a one a penalty would have no influence.

CHAPTER XXXII.

THE SUBJECTIVE MIND.

Question. What is meant by the subjective mind?

Answer. Those mental phenomena that occur outside the realm of the consciousness and which are usually described under the term instinct, or hereditary knowledge.

Ques. What are the characteristics of the subjective mind?

Ans. 1. It manifests itself through the body, and as some think, outside the body altogether.

2. It does not appear to be confined to the brain, for in such animals as are able to exist without a brain it manifests itself after the brain has been removed.

3. It is not the result of education and its manifestation becomes hidden and overshadowed as education becomes more and more perfect.

4. It is apparently mature at birth.

5. As the objective mind becomes obscured by bodily disease, and especially by brain disease, its manifestations are more marked.

6. It is not capable of development, except as the objective mind can be obscured by suggestion or induced sleep.

7. As brain disease increases, the body comes more and more to depend upon it for guidance and control.

8. In the early infancy and extreme old age, known as the second childhood, it is the only manifestation of motive power there is. This is also true in some cases of dementia.

9. It seems to operate entirely through the influence of suggestion, or some outside stimulus. Its automatism is, at least in the presence of any degree of objective mind, nil.

Ques. What are the faculties of the subjective mind?

Ans. 1. Mental perception or telepathy.

2. The natural appetites with characteristics as described.

3. Absolutely perfect memory, like a camera and phonograph combined.

4. Reasoning by deduction and perfect mathematics.

5. Perfect knowledge of music.

6. Natural emotions of love and hate, which are well known, but hard to describe.

7. Dreaming.

8. Self-preservation.

Ques. What are the manifestations of so-called telepathy or mental perception?

Ans. A. Mind reading.

B. Clairvoyance.

- C. Clairaudience.
- D. Presentments of danger.
- E. Knowledge of the way home.
- F. Accurate knowledge of the lapse of time.

Ques. What are the natural appetites?

Ans. A. For fresh air.

B. For food.

C. For drink.

D. For sleep.

E. For sexual intercourse.

F. For warmth.

G. For company.

Ques. What cases illustrate the faculty of a perfect memory?

Ans. A. Natural reporters, people who are able to listen to a sermon, or lecture, or hear a book read, even in a foreign language, and repeat every word afterwards.

B. In some people suffering from insanity there has been exhibited the power of reciting long passages and whole chapters of Hebrew or Greek, which they never studied and of which objectively they are entirely ignorant, but which they have heard read at some portion of their existence.

C. The same ability is sometimes exhibited while under hypnotic influence.

D. It is also evinced by the vivid memory exhibited for the events and conversations of childhood by old people after the recollection of recent occurrences is lost.

E. It is shown by the natural genius found in actors and painters for mimicry and impersonation.

Ques. What well known cases illustrate the faculty of deductive reasoning, or natural mathematics?

Ans. A. The case of Zera Colburn, who at the age of eight years, having never studied mathematics, was able to answer the most complicated problems, such as raising numbers to any power and extracting fractional roots, almost instantaneously and with absolute correctness.

B. The case of numerous child preachers and orators that have from time to time appeared.

C. The correct answer frequently given by spiritualist mediums, while in the trance state, to questions put to them, is generally explained in this way.

Ques. What well known cases illustrate the natural knowledge of music?

Ans. A. The case of Blind Tom.

B. The cases of those who play musical instruments by ear.

C. The genius of poets for rhyme, rythm and jingle.

Ques. In what ways are the phenomena of dreaming exhibited?

Ans. A. By somniloquism and somnambulism.

B. By hallucination, or mind created pictures, effecting either of the senses of perception, such as sight, hearing, feeling,

smelling or tasting. These are especially vivid in delirium and in some stages of insanity.

C. By illusion, or fantastic modification of real pictures, perceived by the senses.

D. By reproduction and rearrangement of the scenes of past events, thus forming what might be called composite pictures.

Ques. What are the main sources of suggestion capable of stimulating the subjective mind at times when the objective mind is obscured?

Ans. 1. Intentionality, by the objective mind of others, as in hypnotism.

2. Through disturbed bodily conditions, by action of the reflexes.

3. Through the perceptions, by stimulating the memory.

Ques. What are the different causes and conditions which may bring about obscurity of the objective mind sufficiently to allow the suggestions mentioned to act?

Ans. 1. Posture, as practiced by Indian devotees.

2. Concentration of vision on some bright object.

3. Fasting.

4. Long vigils.

5. A certain condition known by Indian travellers as Laiti.

6. Disease of the brain.

7. General diseases that weaken the nutrition of the brain.

8. Slight anaesthesia, produced by drugs.

9. Light natural sleep, as when near the waking point.

10. Periodicity is frequently shown in all these causes.

Ques. What facts are important in connection with the working of the subjective mind in disease of the brain and these other conditions just mentioned?

Ans. 1. The condition, where the subjective mind is in partial or complete control is one of partial or complete irresponsibility. The body follows the impulse of the most recent or strongest suggestion.

2. In delusional insanity the suggestion may control the nature of the delusion.

3. In natural sleep the suggestion may control the nature of the dreams.

4. In epileptic insanity the most recent suggestion may control the act, which cannot be very complicated, as the condition is transient.

5. In mania the train of ideas passing through the mind are but pictures from memory, the idea now present suggesting the one to follow, unless a fresh suggestion is received by the perceptions.

6. In delirium the train of ideas acts as a suggestive force, the same as in mania, the perception, however, are often so weakened by the disease that no new suggestions are received.

7. In idiocy and imbecility, owing to congenital defects in the development of the

brain, the perceptions are faulty, so that suggestion from the objective minds of others is not readily received. For this reason education is either difficult or impossible, in proportion to the gravity of the defect. The suggestions are those derived from the pictures of memory, from other years, and from disturbed bodily conditions.

8. In dementia the perceptions are also weakened, so that external suggestions do not readily act. Here the suggestions are those derived from the pictures of memory from other years and from disturbed bodily conditions.

9. In melancholia, some one great emotion, either of fear or sorrow, forms a suggestion that rules the mind to the exclusion of all others, controls the delusions and determines the acts. This great emotion may have been due to a mistaken perception of the true condition of things, but the train of deductive reasoning set up by the suggestion is usually correct.

10. In paranoia, the suggestions most ac-

tive are derived from the ambitions, beliefs, and acquired cravings. Such ideas, long dwelt upon, come to control the mind and affect the responsibility. Here the perceptions are unaffected except by the suggestions working in the case. The delusions are likely to be few and systematized. Here the brain disease may be developed subsequently to the appearance of the delusion.

11. In paresis, or general paralysis of the insane, the disease of the brain is the cause of the mental aberration. In the first stage the suggestions most active are those of the ambitions of ordinary life. For a time the faculty of comparison and judgment are able to hold these suggestions in check, but as the disease progresses and the perceptions and recollections become weakened, this check is lost and the delusions become those of extravagant, gratified ambition. As the brain disease increases dementia succeeds and the suggestions of that condition are alone capable of affecting ideas and actions.

CHAPTER XXXIV.

INSANITY.

Question. What questions have to be considered in examining a person suspected of insanity for the purpose of determining the condition of his or her mind?

Ans. 1. What is the bodily condition?

2. Is there any trouble with the vital functions, circulation, respiration, digestion, secretion, nutrition, or generation?

3. Is the function of motion normal, the reflexes, walking, writing, articulation of speech, or is there history of spasms, convulsions, epileptic or cataleptic fits?

4. Is any paralysis present, either partial or complete, local or general, hemiplegic or paraplegic?

5. Are the special senses normal, hearing, seeing, feeling, smelling, tasting, temperature, pain, etc.?

6. Are the perceptions perfect, so that objects are correctly identified?

7. To what state of perfection has the objective mind been developed?

8. What have been the person's opportunities for education, not only in books, but in mechanical learning, hand work, etc.?

9. Does the person still retain the ability to apply the results of such education to the solution of the problems of everyday life?

10. In what condition is the person's recollection of everyday events?

11. Is recollection good, from association of ideas?

12. What acquired cravings has the person?

13. Are such acquired cravings indulged with comparative moderation or are they exaggerated?

14. What is the person's past history in this respect?

15. Are the person's emotions of approval and disapproval such as would be likely to have resulted from his or her habits, customs and experiences?

16. Are these emotions similar to those he or she exhibited in former life, or are they changed?

17. In what condition are the faculties of judgment, comparison and reasoning by induction?

18. Is the person's faculty of communicating ideas by language, either spoken or written, in a normal and usual condition?

19. In what condition is the person's will or power of choice?

20. Does the person's conduct differ from that previously exhibited, and if so, in what ways?

21. What insane or unusual acts has the person committed?

22. What motives were alleged for these acts?

23. Are these motives such as would have been likely to influence the person in his or her most normal condition, considering all the prejudices of education and experience?

24. Were the reported acts trivial and harmless or were they criminal?

25. If criminal, describe all the circumstances connected with the crime?

26. Does the person confess to periods of unconsciousness?

27. Are there any illusions, hallucinations, or other aberration of the perceptions?

28. Are there any such symptoms complained of as dizziness, vertigo, fits, spasms,

formication, sensations of confusion in the head, or flashes of heat or cold, noises in the ears, etc.?

29. Are there any delusions present, if so, what is their nature?

30. Are the alleged symptoms of unsound mind continuous or periodic?

31. What is the family history, immediate, collateral and atavistic.

Ques. What bodily conditions are likely to cause insanity?

Ans. 1. Hereditary influence, either parental or atavistic of a neurotic character.

2. Constant association with neurotics, through the influence of continuous suggestions and the natural tendency of the human race to imitate and mimic.

3. Disease of the blood vessels, leading to apoplexy and impaired nutrition of the ganglionic cells.

4. The irritation of foreign bodies in the brain.

5. The pressure of neoplasms growing on the brain.

6. The pressure and irritation of depressed fractures and the cicatrices of wounds.

7. Concussion of the brain.

8. Syphilis, either hereditary or tertiary.

9. Tuberculosis.

10. The poisonous effect of narcotic drugs.

11. Autointoxication from defective elimination.

12. Long continued loss of natural sleep.

13. Excesses in any of the acquired cravings mentioned.

14. Inability to properly and moderately satisfy any of the normal appetites.

15. Occurrence of some great emotion of joy or sorrow suddenly as a mental shock.

16. Sunstroke and heat exhaustion.

17. Abnormal conditions of other organs than the brain, the reflex irritation from which disturbs the function of the brain.

18. Congenital want of development in the brain.

Ques. What are the most important ways in which these causes act?

Ans. 1. By poisoning the brain cells.

2. By depriving the brain cells of nutrition.

3. By actual destruction of the brain cells.

4. By pressure on the nerve fibers leading from the cells.

5. By preventing proper elimination of waste material from the brain.

6. By strong suggestion obscuring the objective mind.

7. By preventing the development of the brain cells and nerves.

8. By hindering education.

9. By deceiving the mind through false perceptions.

Ques. What legal questions regarding insanity have to be settled by medical testimony?

Ans. 1. Is the person under consideration insane?

2. What is the form or variety of insanity?

3. By what symptom or combination of symptoms does it manifest itself?

4. Does the insanity affect the person's moral or criminal responsibility?

5. Does the public safety require that the person be deprived of liberty?

6. Does the insanity destroy the person's testamentary capacity?

7. Has the person sufficient mind to continue the management of property or should a guardian be appointed?

8. Has the person capacity to enter into a legal contract?

9. Is the insanity continuous or are there lucid intervals?

10. Is the insanity transient or likely to continue for an indefinite time?

11. Is the insanity curable or incurable?

12. What treatment will most likely result in recovery?

Ques. What symptoms lead us to infer insanity or unsound mind?

Ans. 1. Abnormal conduct or language.

2. Depreciation of general health.

3. Insomnia, somnambulism and somnolence.

4. Delirium, hallucinations, illusions, delusions, mania, melancholia, imperative conceptions.

5. Loss or impairment of one or more of the faculties of the normal objective mind, with increased activity of the faculties of the subjective mind.

6. Carelessness in dress, looseness in morals and impatience of the ordinary restraints of society.

7. Symptoms of brain disease other than mental, such as chorea, convulsions, paralysis, disturbances of sensation and the special senses, periods of unconsciousness.

8. Great mental change from the ordinary conduct and character of the individual under consideration.

Ques. How is real insanity to be distinguished from simulated insanity?

Ans. 1. Simulated insanity generally appears suddenly in the midst of health without exhibiting the ordinary stages by which brain diseases develop.

2. In simulated insanity the physical bodily functions are not disturbed.

3. In simulated insanity the appetite remains good and the prolonged loss of sleep, usually exhibited in true insanity, cannot be maintained.

4. The form or variety of insanity usually adopted by the simulator is too difficult to maintain for any length of time, as mania or paranoia are frequent examples.

5. The mask of simulation is usually dropped when the party thinks himself or herself unobserved.

6. There is nearly always a strong motive

apparent for the simulation, such as a crime for which the person seeks to avoid responsibility.

7. If the observer should mention the fact that a certain symptom usual to the form of insanity simulated was absent, so that he may be overheard by the simulator, that symptom will soon appear as a part of the history of the case.

Ques. Into what two classes may insanity be divided as regards its origin?

Ans. 1. Congenital.

2. Acquired.

Ques. How is congenital insanity classified?

Ans. A. Idiocy, arrest in development in the brain previous to birth.

B. Imbecility, arrest in development of the brain in early infancy or childhood.

C. Cretanism, a peculiar form of imbecility accompanied by goitre and sometimes by dwarfing of the whole body.

Ques. What are the general characteristics which distinguish congenital insanity?

Ans. A. Large proportion of deformities and anatomical abnormalities, as compared with normal persons.

B. Weakness of intellect and inability to acquire education, except perhaps of the most rudimentary sort.

C. They are frequently deaf mutes.

D. They frequently exhibit abnormal hereditary or atavistic traits of character.

E. They resemble the lower animals in their habits and appetites, the latter are usually strong and badly controlled.

F. They are very susceptible to disease and are usually short lived.

G. Most of them are harmless, but occasionally they exhibit murderous or rapistic tendencies and require restraint. They should be carefully watched, especially at the critical periods of life.

H. They exhibit all degrees of mental deficiency from slight eccentricity or weakness of mind, to total absence of all mental faculties.

I. They frequently become remarkable for their ability in the exercise of some of the faculties of the subjective mind, such as music or mathematics. In this respect they are closely allied to men of great genius.

Ques. What phenomena in different combinations make up the clinical history of all cases of acquired insanity?

Ans. A. Aphasia, word blindness, objects are recognized, but the person is unable to call the names of them.

B. Apraxia, inability to recognize objects, though the ability to pronounce the names may be retained.

C. Agraphia, inability to remember how to write or frame letters.

D. Illusion, or false perception, the perceptive faculties conveying to the mind a false impression of an object.

E. Hallucination, a false picture created entirely in the mind, as a dream.

F. Delusion or false belief after opportunity for judgment and comparison has been allowed.

G. Delirium, temporary confusion and incoherency of ideas accompanied by great restlessness and most likely by the last three phenomena mentioned.

H. Melancholia, a low, depressed state of the emotions, great sadness and tendency to suicide or murder. There is also inattention to anything save the one persistent ruling delusion. These nearly always require restraint and watching, as they are very suspicious of their nearest friends. There is also low temperature, disordered state of elimination generally, and poor appetite.

I. Mania, a highly exalted state of the emotions with rapid change of ideas, accompanied with violent and extravagant actions. The body is often in continuous motion. Following some rapid impulse, murder or suicide may be committed. In this state some form of restraint is always necessary. The mania may come on suddenly and generally is not of very long duration. Delirium is often present and elevated temperature is the rule.

J. Monomania or reasoning mania. Here the reasoning faculties are retained save in the line of the prevailing delusion. There is seldom any hallucinations or illusions, and delirium is absent.

Ques. What are the most prominent monomanias?

Ans. a. Kleptomania or mania for stealing, the patient appropriating articles for which he has no possible use.

b. Pyromania or mania for setting fires.

c. Wandering mania, or tendency to keep wandering from place to place.

K. Lycanthropy, characterized by a tendency to return to savagery and live like a wild beast. They frequently go howling about like a wolf, whence the name.

L. Erotic mania, characterized by disturbances in the sexual desires and functions. (See chapter on *Psychopthia Sexualis*.)

M. Lypemania or pain mania, a form of insanity characterized by delusions of great pain and suffering. This usually accompanies melancholia.

N. Dementia, a profound mental enfeeblement usually appearing at the termination of other forms of insanity. There is a complete loss of the perceptions and gradually all that remains of the other faculties disappear.

O. Imperative perceptions, the sudden bursting into the consciousness of a flood of ideas that have no connection with the existing train of thought. They are entirely out of control of the individual. They take various forms and affect materially the responsibility during the time of their continuance.

P. Catalepsy, a somnolent state, accom-

panied by a peculiar rigidity of the muscles.

Ques. What are the main diseases of acquired insanity in which these phenomena occur?

- Ans. A. Paranoia.
- B. Hysteria.
- C. Epilepsy.
- D. Alcoholism.
- E. Hypochondriasis.
- F. General paralysis of the insane.
- G. Puerperal mania.
- H. Alternating or circulatory insanity.
- I. Dementia senilis.

Ques. What are the characteristics of paranoia?

Ans. a. They inherit a neuropathic constitution.

b. They generally possess congenital physical abnormalities.

c. They are impelled to strange acts by imperative conceptions.

d. They always appear eccentric and odd.

e. The real insanity generally appears at puberty or the climacteric.

f. The onset is generally excited by some excess, privation, anxiety over work, or loss of sleep.

g. When coming on at puberty, it takes the form of mild mania or melancholia, with more or less stupor and confusion, and rapidly passes into dementia.

h. When coming on later in life, it develops into active delirium, sensorial in character, with depressed or exalted ideas. Delusions of persecution and intense hallucinations of hearing of a terrifying nature. These symptoms may end suddenly, but have a great tendency to relapse and finally run into the chronic form of the disease.

i. The chronic form of the disease shows itself in three principle varieties—paranoia persecutoria, paranoia religiosa, and paranoia litigiosa. The first is characterized by delusions of suspicion and persecution. They think everybody trying to annoy and injure them; that they are the victims of conspiracy by Jesuits, Freemasons, or Anarchists. Hallucinations of smell and taste are common, so that they believe their enemies are trying to poison them. They may refuse food or insist on cooking it themselves.

j. For a time they endure their persecutions, but later they become defiant and threaten their enemies or seek redress in courts, but finding no help, they become aggressive and very dangerous and may on the least suspicion take the life of some person around them or perform some brutal act for the purpose of calling attention to their troubles. They never murder secretly, but always openly, so as to attract attention.

k. The next stage is one of magnificent delusions. They become kings in exile or heirs to large fortunes, learned poets or great inventors, and from this they rise to be Messiah or Queen of Heaven.

l. The last stage, as in most other forms of insanity, is dementia, which closes the scene.

m. In paranoia religiosa, the delusions are altogether of a religious nature. For a long time this may manifest itself as a monomania and the patients appear sound on other subjects, but they pass through about the same stages as in the persecutory variety and become very dangerous, and finally sink into dementia.

n. In paranoia litigiosa, the tendency is to engage in law suits. They present all sorts of claims in the courts and fight them as long as they can obtain funds, and sometimes successfully. They pass through the same stages as above forms.

Ques. What are the characteristics of hysterical insanity?

Ans. a. It has a neurotic temperament and heredity as a predisposition.

b. There is usually disease of the sexual organs from which reflex disturbances arise.

c. There is nearly always both physical and psychological feebleness as a concomitant condition.

d. They are frequently thrown into convulsive states.

e. They are emotional, imaginative, impressionable, imitative.

f. They are egotistic and fond of attracting attention and always indulge in the sort of conduct which they think will render them most interesting.

g. They are subject to confusion of ideas and intense hallucinations. They exaggerate their pains, accuse others of unkindness and pretend resignation to their state.

h. They are often disagreeable, quarrel with their friends, abuse their families and neglect their own occupations to engage in useless benevolent work outside.

i. Their conduct is contagious, all the hysterical people in the neighborhood following in the same tricks, and they even have a strange effect on sane people.

j. They are usually unfavorable cases for recovery, except by mysterious and miraculous methods, and are prone to relapse.

Ques. What are the characteristics of epileptic insanity?

Ans. a. Epilepsy exhibits itself in two forms—petit mal, where the patient is occasionally seized with sudden attacks of unconsciousness, short in duration. He may stand still and stare vacantly or start up and perform a few acts, or run violently for a short distance. There is a slight tonic spasm of the whole body, but no clonic convulsions. And grand mal, where the attacks start with a sudden pallor, dilated pupils, a violent scream, simultaneous loss of consciousness, falling to the floor, with clonic and tonic convulsions. The face now becomes livid, the eyes are turned to one side, there is frothing at the mouth, biting of the tongue, involuntary passages of urine and

faeces. This state is followed by a period of deep sleep.

b. The place of these two forms of attack may be taken by a seizure purely psychical in character, during which strange acts may be committed, such as exposing the person, undressing in the street, or even serious crimes, such as assault or murder; or they may shout and sing in a truly maniacal manner.

c. There is often a sort of warning or aura preceding these attacks. This appears in the form of a localized spasm or a peculiar sensation.

d. These attacks are periodic in character and there is usually some days or weeks between them, but they may succeed each other with considerably rapidity and the same person may have all the forms at different times.

e. The epileptic is nearly always of neurotic temperament and heredity, and may show directly inherited epileptic fits.

f. When acquired, it generally results from injuries to the head or acute attacks of brain disease, or from intense mental emotions, such as a great fright.

g. The most common age for it to show itself is under twenty years and may continue for a life time; the prospect of a cure not being very good, unless the cause can be removed.

h. Insanity of a maniacal form may precede the attacks or follow them and last for a considerable time, weeks or months, also stupor.

i. The mania may be accompanied by hallucinations of terror and the delirium show furious excitement, the temperature becoming high and the arteries throbbing.

j. In the interval of the attacks the patients are ill-tempered and fault-finding, often very religious, yet frequently they may, by kind treatment, be rendered sociable and friendly.

k. Occasionally at the time of the attack, they may wander away from home, but only for a few days, as a rule.

Ques. What are the characteristics of alcoholic insanity?

Ans. a. There may be a neuropathic constitution, as a predisposing cause of the alcoholic excesses, or the habit may be acquired without any such original taint.

b. The disease may take the form of dysomania, which is simply a periodic desire for drinking. The patient may be free from this desire for weeks and then spend four or five days in steady debauchery. At the end of such time the thirst or craving leaves him and he will sober up and become a respectable citizen, until another period arrives.

c. These periods are preceded by a nervous, irritable state, lasting for a day or two.

d. There is no relation between the amount of alcohol taken and the brain symptoms, some bearing the poison better than

others, but as a rule those of a neurotic temperament bear alcohol badly.

e. Some cases after a few days or weeks of alcoholic excess develop hallucinations, illusions, and delusions of terror and fear. In attempting to escape from the dangers which they imagine threaten them, they may jump from a window and kill themselves or they may strike and hurt some one else. They are always arrant cowards.

f. They often show a tendency to injure themselves by mutilation, such as cutting or burning themselves, or attempting to tear out their own eyes.

g. The pulse is rapid and irregular, the countenance pallid, the tongue coated and the breath offensive. They refuse food, are sleepless and worse at night.

h. After many attacks of this sort, the patients sink into dementia.

i. The prognosis of the acute attacks is favorable, but there is not much hope in cases advanced to the condition of dementia. Those who suffer from periodic attacks of dysomania are generally incurable.

Ques. What are the characteristics of hypochondria?

Ans. a. It is always preceded by a neurotic inheritance.

b. The most common age is about forty years.

c. The onset is subsequent to some cause which materially disturbs the general health, such as a great anxiety in men or the menopause in women.

d. Disturbances of digestion are next in order; neuralgic pains about the stomach and intestines, and constipation. Food causes distress and less and less is taken. Sleep is very imperfect.

e. The ideas become painful and anxious, their attention is fixed upon these morbid sensations and functions of the body. Decreased power in the sexual function natural to age, and weak condition of the body disturbs them. They now fear that they are the victims of some grave disease, that the intestines are closed up, that they have cancer, that their bodies are wasting away, that their brains are undergoing a process of decay. The sins and indiscretions of their youth are being visited upon them, their friends and physicians have no knowledge of the gravity of their situation, there never was just such a case as theirs.

f. They recount over and over to others their sensations and troubles, for they can think of nothing else and resist every effort to urge them to eat or dress. Sometimes they will eat, if food be left near them, and deny it afterwards. They will resist the calls of nature, claiming that their bowels are closed up, until they pass their excrements in their clothing.

g. They are disagreeable and exacting, their will power is weakened and they are entirely unable to correct their own erroneous impressions, yet reason correctly on all

matters disconnected with their troubles in regard to disease.

h. These cases are always chronic and the prognosis is quite unfavorable. True melancholia may be added to the complaint. Even if a cure is at last attained after many remissions, it is generally due to some radical change in the outward circumstances of the patient.

Ques. What are the characteristics of general paralysis of the insane?

Ans. a. There is frequently a neuropathic inheritance.

b. The causes mentioned are excesses of all kinds, alcohol, venery, mental strain, business anxiety, late hours, excessive eating, syphilitic poison.

c. The onset is a radical change in habits and disposition. They become cross, irritable, fault-finding, quarrel with their wives and children, neglect their work, make mistakes in business, become careless in dress.

d. Character changes, they drink heavily, engage in disorderly conduct, are unable to accomplish anything in business, associate with fast women, and waste large sums of money, if they have it.

e. They then begin to complain of fullness in the head, dizziness and insomnia. The general neuralgias, such as lumbago, sciatica and migraine, are frequently causes of complaint.

f. After these symptoms, delirium of the most extravagant nature may set in, or perhaps melancholia, during which they may attempt the lives of their family or others, or even commit suicide.

g. The next stage is marked by the development of grandiose delusions. Most are quiet and happy in these extravagant ideas of wealth. They do not continue the same plan for their great business enterprises, but forget one day what they had in view the day before. They preserve the most common articles, thinking they are gold or diamonds and spend money lavishly, if unrestrained.

h. At this period the sexual desire is often much exaggerated and rapes may be committed.

i. They are often very emotional and cry without cause, and they may complain of bodily disease or have mild delusions of persecution.

j. The next stage is loss of memory and dementia, the health failing and various paralysis coming on, the speech gets thick and hesitating, the pupils fail to react to light, trophic changes occur, they become too feeble to leave their beds and generally some intercurrent disease carries them off.

k. The prognosis is unfavorable. They generally live about two or three years after the insanity is apparent.

Ques. What are the characteristics of puerperal mania?

Ans. a. It may come on previous to labor,

during pregnancy, during labor or after labor, in the period of convalescence.

b. The cause is supposed to be due either to defective elimination, reflex irritation, set up by the gravid uterus, or septic poisoning.

c. The onset is with nervousness and loss of sleep, followed by delirium and mania of the most extravagant and violent kind. In some cases they become suspicious and develop delusions of persecution or sink into melancholia. During this period they may kill their babies or throw themselves from the window. Some are very persistent for suicide.

d. Shrieking and yelling is a frequent symptom.

e. The prognosis is favorable. The duration of the trouble is from ten days to two or three months.

Ques. What are the characteristics of alternating insanity?

Ans. a. It is particularly characterized by alternating attacks of mania and melancholia, after which intervenes, generally, a short period of apparent mental health.

b. The mania is of a mild type, a state of over-activity and excitation, mentally and physically. They are constantly occupied with some business project, but do not stick to anything for any length of time. They spend money recklessly, if allowed to do so, and may go to excess in drinking.

c. They are egotistical, fault-finding and constantly making complaints against legal authorities and officers of institutions. They have exalted ideas of their own importance and may be hypochondriacal, but not in a gloomy way.

d. They write long letters, essays and books and make drawings of building, which they expect to erect, all of which are curious and grotesque. They are constantly active, moving and talking incessantly.

e. Suddenly the maniacal stage changes to one of melancholia. The passive form is the most frequent. They become quiet and avoid people. Hallucinations are rare, but they may have delusions that some evil is going to happen to them, or that they are going to be carried away.

f. They speak less and less and in a low tone. The expression becomes apathetic and dull. They may go to bed and nothing can induce them to get up. They have to be urged to eat.

g. The secretions are diminished, the bowels constipated, the circulation impaired, the feet cold and the pulse weak and small. This is just the reverse of the previous stage, for then the secretions were active, the appetite good, and they eat heartily and grow stout.

h. The periods may consist of melancholia followed by mania or mania followed by melancholia.

i. The duration of the periods may be equal and together take up a whole year or longer, or the melancholia may be longer

than the mania, or the alternation may take place as often as every other day.

j. When the cycle is run there come a period of health, but this period has a tendency to grow shorter and shorter until, eventually, it is shaded out altogether, all the time being taken up either with the mania or the melancholia.

k. The diagnosis in these cases rests upon the history of periodicity.

Ques. What are the characteristics of senile dementia?

Ans. a. It may begin at any time after fifty years of age.

b. It is due to changes in the arteries and general disturbance in nutrition.

c. It begins with irritability, vertigo and insomnia.

d. The next stage is loss of memory for recent events, though they recall those of former years. They become obstinate, unreasonable and suspicious, think the house is being robbed and everybody is going to starve.

e. After a time they eat freely, perhaps indulge in alcoholic excesses, but in spite of these they grow thin and haggard. They often forget that they have eaten a meal and call for another.

f. They lose all sense of propriety, be come obscene in their talk, expose their persons in the streets, contract foolish marriages, or attempt to assault young girls.

g. The defect of memory becomes very great, so that they lose their way home, forget names and the house they live in. They frequently think that they are not in their own houses and may be very troublesome, wandering off.

h. They suffer from cystitis, and are especially liable to pneumonia. They develop bed sores, and perhaps diarrhoea, and death ends the scene.

i. The duration, unless complicated by intercurrent disease, is from one to three years. There is no cure.

CHAPTER XXXV.

STRICTLY LEGAL RELATIONS OF INSANITY.

Question. What points are necessary to criminal responsibility?

Answer. 1. The person who commits the act must be a free moral agent and must not be compelled to the act by fear of immediate death or great bodily harm.

2. The person must be conscious of the act committed.

3. The person must have sufficient mind and memory to render him capable of realizing the legal and moral consequences of the act that the act is essentially and morally wrong and forbidden by law.

4. The person must have sufficient will power to resist all impulses leading to the act.

Ques. What points in regard to an act indicate the insanity of the person performing it?

Ans. 1. The act is usually nonsensical.

2. The act is usually without any prearranged plan.

3. The act is without any sufficient motive.

4. The act is usually incongruous with the antecedents of the individual.

5. The act is open and avowed, without secrecy.

6. No plan or attempt to escape is made.

7. The person generally has no memory of the act, and consequently no remorse.

Ques. What exceptions and qualifications may be made to these rules?

Ans. 1. Supposing the delusion under which the person was suffering at the time of the act to be a fact, the act itself may be sensible. For example, an insane man, believing himself the father of the King of

Siam might will his property to the King of Siam. The act from this standpoint might not be without sense.

2. A melancholic may arrange a very complicated plan of evading his guards and committing suicide. A paranoiac may arrange a complicated plan of revenge on his supposed persecutors.

3. It must not be supposed that because no sufficient motive can be discovered for an act that none exists, and even with sane people revenge and hatred may be a sufficient motive for a crime.

4. A person given to certain insane acts may have sufficient mind to keep those acts a secret; for instance lust murders and the doings of necrophiliacs.

5. A complicated plan of escape is sometimes made in case the insane idea is not fully carried out by the first attempt. If the idea includes the killing of a whole family, the murderer may lay a plan to escape the consequences of the first death at his hands until the others shall have been accomplished.

Ques. What points are important as regards the commitment of the insane?

Ans. 1. An insane person may be confined in an asylum when such seclusion is necessary to his recovery.

2. He may be confined after he has committed some act of violence.

3. He may be confined when he makes such threats of violence that grave danger is reasonably apprehended, such as when the insane person secures weapons to carry insane threats into execution.

4. When his extraordinary conduct renders him a nuisance to the community.

5. When he has committed some crime or become a vagrant.

6. With the consent or request of his family he may be arrested at any time for examination.

7. When, in the discretion of the court it becomes necessary, the judge may order a commission to inquire into the sanity of any suspected person. This committee is usually composed of one lawyer, and one physician and one lay member. It is the duty of this commission to visit in prison, make careful examination of the suspected party and report to the court the result of their examination.

8. The suspected party has the right to traverse the decision of this commission and defend his sanity in open court, if he so desires.

9. No superintendent of an asylum is allowed to receive any patient without his consent or the order of the court, except on the certificate of two entirely disinterested physicians, stating the nature of the insanity and the request of the near relatives of the person so confined.

10. The right to a writ of habeas corpus applies to these cases, at all times, as much as to a person confined in a jail.

11. No superintendent has a right to discharge any person committed to the asylum by order of the court without the same court orders his discharge.

12. Should a person found guilty of crime be declared insane by the jury, the judge may order his commitment to an asylum.

Ques. At what times may the defense of insanity be presented to a court, to avoid the responsibility for crime committed?

Ans. A. Before the trial for the purpose of showing that the party accused is then insane and incapable of comprehending a trial made in his behalf.

B. During the trial to show that the party accused was insane at the time the crime was committed and, therefore, irresponsible for his act.

C. After the trial and before sentence is executed, to show that the convicted person is insane and, therefore, incapable of realizing the punishment inflicted upon him.

Ques. What degree of mental soundness must be possessed in order to constitute testamentary capacity?

Ans. 1. The person should be aware of the extent, value and location of his property and its description.

2. The person should realize who are his natural heirs and dependents. In order to secure this, he is obliged to mention his legal heirs in his will.

3. The person must not be under any undue influence at the time of execution of the will.

4. The will must be witnessed by two en-

tirely disinterested witnesses, who may be called upon to swear to the testator's mental condition.

5. Old age does not of itself incapacitate a testator, yet the incapacity may result from old age and not from disease alone.

6. Mental weakness, alone, does not incapacitate if there be no undue influence.

7. The fact that the will is in the handwriting of the testator is presumptive evidence against undue influence.

8. If the testator is able to repeat the disposition he has made of his property it is a pretty good test of his capacity.

9. The fact that a will contains eccentricities does not invalidate it, unless it can be shown that these eccentricities were sufficient to destroy capacity.

10. When a person has once been declared insane, his capacity must be proven before the will can be probated. It must be shown that the will was executed during a lucid interval.

11. The fact that a will is cruel and unjust to some, or all, of the relatives of the testator does not, of itself, invalidate the

11. The fact that a will is cruel and unjust had been created by fraudulent representations made to the testator concerning such natural heirs.

12. Drunkenness will not invalidate a will unless the drunkenness was to that point where it produced incapacity of the testator.

13. The proof that the testator was the subject of delusions or hallucinations will not invalidate a will, unless it can be shown that these delusions destroyed the capacity of the testator.

14. Partial loss of memory, such as might be naturally found in old people, does not invalidate a will, but complete loss of memory would invalidate.

15. A deaf mute may have testamentary capacity, but it may be difficult to show that such a person had knowledge of what the paper contained. The test here is one of education.

16. When undue influence is claimed against a near relative of a testator, such as husband or wife, son or daughter, said influence must amount to constraint in order to invalidate the will. When claimed against an attorney, physician or confidential friends, the burden of proof might be the other way.

17. When drugs or intoxicants are intentionally administered to a testator, it will be sufficient to void a will made while under such influence.

18. The question to a medical witness of fact may be: "Describe the mental condition of the testator at the time he executed the will."

19. The question to an expert witness would be: "What would be the mental con-

dition of a person described in a certain hypothetical question?"

20. The provisions of a will should be clear and evident, and not complicated and difficult of comprehension, and it must be remembered that a person cannot tie his property up and give it away at the same time.

21. The tendency of the law is to protect a man in the right to leave his property just as he sees fit and proper, no matter how old, feeble or deformed he may be, but he must be capable of having a clear and decided choice in the matter.

Ques. What points are important regarding civil responsibility?

Ans. 1. The estate of an insane man is chargeable with the necessities of life furnished either him or his family dependents.

2. A contract made when temporarily insane from drink may be ratified when the insanity has passed away.

3. A contract made during a lucid interval will hold providing the lucid interval can be proven.

4. A contract entered into when insane may be voided upon recovery, the facts being shown to the satisfaction of the court. This applies to the marriage contract as well as others.

5. Adultery is a suitable cause for divorce, no matter if the offending party be insane. This has been denied in some courts.

6. When insanity existed in one party previous to marriage, unknown to the other party, should the insanity recur subsequent to marriage, the wronged party may be allowed a divorce or decree of annulment, but if the insanity develop after marriage or the previous insanity be known to the other party, no such decree can be granted.

7. A bargain made with an insane person, the other party not being aware of the insanity, if no advantage be taken will hold

good unless the parties can be put back in the same condition in which they were before the bargain took place.

8. Should a party be made drunk or insane by another and that other take advantage of such disability to secure a contract or bargain, the same may be voided on proof.

9. The voidance of a contract made by an insane party must be sought on the part of his relatives, guardians or administrators, and not by the man himself.

10. Monomania does not incapacitate a person on other topics than that to which the delusions apply.

11. The estate of a lunatic is liable for the damage done by his property.

Ques. What is meant by interdiction?

Ans. The taking away from a man the administration of his own estate and placing it in the hands of a guardian.

Ques. What degree of mental alienation warrants such procedure?

Ans. 1. It must amount to incapacity to manage property.

2. In order for drunkenness to constitute incapacity of this character it must be shown that the drunkenness is habitual. This does not necessarily mean all the time, but so much of the time that he cannot be depended on to manage his property in a rational manner.

3. Old age does not constitute incapacity.

4. Bodily infirmity does not constitute incapacity.

5. Reckless and extravagant expenditure of money does not constitute incapacity.

6. A person may make a good defense of his sanity before a court and yet be entirely incapable of managing property in a rational manner.

7. The finding of a commission in lunacy may be traversed before a jury if the alleged lunatic objects to the finding.

CHAPTER XXXVI.-

PSYCOPATHIA SEXUALIS.

Question. Of what does *psycopathia sexualis* treat?

Answer. It treats of those mental abnormalities which manifest themselves in alterations of the sexual desires and functions.

Ques. Why is *psycopathia sexualis* an important study to the Medical Jurist?

Ans. 1. A large number of cases occur in the courts which involve the discussion of sexual perversions.

2. Sexuality is a powerful factor in individual and social existence, the strongest motive to the exertion of strength, the acquirement of property, the foundation of home and the awakening of altruistic feeling.

3. Ethics, aesthetics and religious customs are much influenced by individual sex-

ual feeling and by the public estimate of sexual morality.

4. Civilization differs from savagery and barbarism mainly in the manner in which sexuality is controlled and developed.

Ques. What physiological facts are involved in the discussion of *psycopathia sexualis*?

Ans. 1. During the period of sexual life desires arise in the consciousness which have for their purpose the perpetuation of the race.

2. These desires vary in strength with the individual, race, age, climate, hereditary influence and social circumstances.

3. The sexual instinct seems to be located in the cerebral cortex, near to the center de-

voted to the olfactory sense and other perceptions.

4. The cerebral cortex, by reason of apperceived or reproduced sensual ideas, reacts on the reproductive organs, causing hyperaemia, secretion of seminal fluid, erection and ejaculation.

5. The central cerebral stimuli are generally visual perceptions, memory pictures, tactile impressions, audatory and olfactory perceptions, such as:

A. Musical sounds, particularly singing.

B. Perfumes of various kinds, particularly the perspiratory odor and the perfume of flowers.

C. Reading of lascivious stories.

D. Sight of sensual gestures, attitudes and pictures.

6. The erection center is located in the spinal cord, between the brain and the organs of generation, and receives and transmits impulses both ways, from the brain to the sexual organs and from the sexual organs to the brain.

7. These centers may be excited to action by stimulation, applied anywhere along the track of the connecting nerves or adjacent ganglia.

8. The duration of erection is dependent upon the duration of the exciting stimulus, the absence of inhibitory influences, the energy of the center and the time of ejaculation.

9. The local causes which excite erection and awaken sexual desire are:

A. Distention of seminal vesicles.

B. Enlarged Graafian follicle.

C. Hyperaemia of the sexual organs.

D. Plethora abdominalis.

E. High external temperature, warm beds, etc.

F. Cantharides, pepper and other spices.

G. Stimulation of the gluteal region by spanking, whipping, etc.

H. Heat applied to the spine.

I. Irritation of certain erogenous zones, such as the nipple, clitoris, vaginal walls, cervix uteri, anus, tongue, glans penis and the integument of the scrotum.

10. The stimulating concepts are counteracted by corresponding inhibitory concepts which under unfavorable circumstances overcome sexual desire and prevent coition. These are usually derived from the restraining suggestions of society and education.

11. The sexual desire and appetite is a faculty of the subjective mind, while the inhibitive influences belong to the realm of the objective mind.

12. The exciting and inhibitory powers are variable quantities and upon their correct balance the normal conduct of the individual will depend.

13. The ejaculation center is located in the spinal cord and is a reflex center. It is set in action when the quantity of seminal

fluid in the vesicles is sufficient to cause them to contract and expel their contents into the prostatic urethra.

Ques. How are the sexual neuroses classified?

Ans. 1. Peripheral.

2. Spinal.

3. Cerebral.

Ques. Into what sub-classes may the peripheral neuroses be separated?

Ans. 1. Sensory.

2. Secretory.

3. Motor.

Ques. How are the sensory variety divided?

sia.

Ans. A. Those accompanied by anaesthesia.

B. Those accompanied by hyperaesthesia.

C. Those accompanied by pain or neuralgia.

Ques. How are the secretory variety divided?

Ans. A. Asperma, or no secretion.

B. Polysperma, or superabundant secretion.

Ques. How are the motor variety divided?

Ans. A. Polutions, caused by spasm of the vesicles.

B. Spermatorrhoea, caused by paralysis of the vesicles.

Ques. Into what sub-classes may the spinal neuroses be separated?

Ans. 1. Affections of the erection center.

2. Affections of the ejaculatory center.

Ques. What neuroses affect the erection center?

Ans. A. Irritation or priapism.

B. Paralysis and lessened excitability, or impotence.

C. Irritation from cerebral influence.

D. Irritable weakness or abnormal impressionability.

Ques. What are the causes of irritation or priapism?

Ans. a. Reflex disturbances from peripheral sensory irritants, as gonorrhoea.

b. Directly from organic irritation of the nerve tracts from the brain to the erection center, as spinal disease in the lower cervical or upper dorsal regions.

c. Irritation of the center itself by cantharides or other poisons.

d. From psychical irritation, causing a long-enduring erection, with libido sexualis, as in satyriasis or nymphomania.

Ques. What are the causes of paralysis or lessened excitability?

Ans. a. Destruction of the center of nerve tracts, as in disease of the spinal cord.

b. Over-stimulation from venereal excesses, either in coitus or masturbation.

c. Alcoholism or bromides.

d. Cerebral anaesthesia.

e. Anaesthesia of the external genitals.

f. Cerebral hyperaesthesia.

g. Cases exist that only respond to certain stimuli, while they remain impotent to those ordinarily powerful.

Ques. What are the usual sources of inhibition of the erection centers?

Ans. a. Cerebral inhibition, belief in impotence.

b. Fear of contagion.

c. Loathing for that particular woman.

d. Fear of interruption during the act.

e. Imperative conceptions that disturb the mind at the time; some other thought always enters the consciousness.

Ques. What are the usual causes of irritable weakness or abnormal impressionability, with diminished energy?

Ans. a. Weakness of the nervi erigentes.

b. Weakness of the ischio cavernous muscle.

Ques. What variety of symptoms affect the center of ejaculation?

Ans. A. Abnormally easy ejaculation.

B. Abnormally difficult ejaculation, coming on late, not at all or in the shape of pollutions after the orgasm had passed away.

Ques. What are the causes of abnormally easy ejaculation?

Ans. a. Absence of cerebral inhibition.

b. Excessive psychical desire.

c. High degree of spinal neurasthenia, caused by sexual abuse. The sight of a woman may cause ejaculation and possibly without any pleasurable sensations.

d. Urethral hyperaesthesia, where the ejaculation may be accompanied with painful sensations.

Ques. What causes lead to abnormally difficult ejaculation?

Ans. a. Inexcitability of center from paralysis.

b. Want of desire or lessened desire.

c. Organic, from disease of the brain or spinal cord.

d. Functional from long continued venery.

e. Diseases of general system, such as marasmus, diabetes or morphenism.

f. Disease of the reflex arc or peripheral anaesthesia.

g. Asperma, no secretion.

Ques. How are the cerebral neuroses classified?

Ans. 1. Sexual paradoxia, where the sexual excitement occurs out of the normal period of sexual life.

2. Sexual hyperaesthesia, or entire absence of sexual desire.

3. Sexual hyperaesthesia, or increased sexual desire.

4. Sexual paraesthesia, or true sexual perversion; that is, excitability of the sexual functions from stimuli.

Ques. What are the two most important forms of sexual paradoxia?

Ans. A. Sexual instinct manifested in

early childhood, before the normal period of its development.

B. Sexual instinct reawakened in old age after the normal function had disappeared.

Ques. What are the causes of premature sexual instinct in childhood?

Ans. a. Phymosis, or narrow prepuce.

b. Balanitis, or inflammation of the prepuce.

c. Small worms in the rectum or vagina.

d. Those cases due to cerebral causes purely, generally occurring in children of neuropathic taint and accompanied by psychoses and degenerative neuroses.

Ques. What form does sexual paradoxia usually take when occurring in old age?

Ans. a. It is often manifested in greater strength than in the same individual when it existed as a normal function, and appears before intellectual weakness comes on.

b. There is always alteration of the moral character of the individual for the worse.

c. It is, at first, expressed by lascivious speech and gesture.

d. They usually select children as the objects of their sexual approaches on account of a feeling of imperfect sexual potency.

e. They frequently select acts which are the equivalent of the sexual act, such as masturbation or handling the genitals of children.

f. They often attempt the sexual act with the lower animals, such as geese, chickens or sheep.

g. It may take the form of sodomy or masturbation with some one of the same sex.

h. They frequently make arrangements to have the sexual act performed by others, in their presence.

i. Indecent exposure of the person in the public streets is a frequent form of paradoxia.

j. They have been known to charter a whole house of prostitution and engage in all sorts of debauchery with them, yet be entirely unable to perform the sexual act in a physiological manner.

k. The state does not last long, for the patient soon loses all responsibility and sinks into profound dementia.

Ques. How is sexual anaesthesia classified?

Ans.

A. Congenital.

B. Acquired.

Ques. What points are important concerning congenital sexual anaesthesia?

Ans. a. They are always persons with degenerative defects and other physical anomalies.

b. The sexual organs may be normal and the secretions such as semen and menstruation be present, yet no corresponding desire or emotions arise.

c. There is often neurotic inheritance,

and others in the family exhibit the same abnormality.

d. They are often given to crime and vagabondage and may develop mania or melancholia, or show imperative concepts.

e. Mechanical or thermic stimulation may induce erection, but never desire or pleasure, and there is frequently disgust for coitus.

f. It occurs more frequently in the female.

g. There are a few cases which have shown some desire for masturbation and yet any attempt to perform the sexual act itself would destroy erection at once.

h. The writings of these individuals are cold and cynical, and frequently frivolous and vulgar.

i. They have been known to commit self castration or attempt that kind of assault on others, with delusions that they ought to prevent the peopling of the world.

Ques. What are the characteristics or acquired sexual anaesthesia?

Ans. a. The causes may be organic, functional, psychical, somadic, central or peripheral.

b. The diminution of desire with age and, temporarily, subsequent to intercourse may be considered physiological.

c. Education, manner of life, physical exertion, excessive mental activity, emotional depression, long continued sexual continence, all tend to decrease sexual desire.

d. Masturbation and sexual excesses may cause it.

e. Certain general diseases cause it, such as marasmus, diabetes, alcoholism, morphenism, cocaineism.

f. Castration produces it sooner or later, though the desire may last some time after this is done.

g. Disease of the spinal cord or brain may lead to degeneration of the cells, which make up the erection or ejaculation center and thus cause impotence and, at the same time, anaesthesia.

Ques. When can sexual hyperaesthesia be said to be present?

Ans. A. When the desire immediately returns after satisfaction.

B. When it occupies the entire attention of the person.

C. In a woman when she seeks coitus of her own accord.

D. Sexual excitement at the sight of persons and things which at ordinary times do not excite such emotions.

E. When the sexual excitement is out of proportion to the physical strength and age.

Ques. What points are of medico-legal importance in regard to sexual hyperaesthesia?

Ans. A. Sexual desire is normally strongest between twenty and forty years of age.

B. It rapidly increases after puberty.

C. Sexual intercourse with many persons

tends to increase desire.

D. Married life tends to preserve the normal moderate instinct.

E. Hyperaesthesia is more rare and more frequently pathological in the female than in the male on account of less normal desire.

F. Those subject to such attacks are nearly always of neurotic heridity.

G. It may, if unsatisfied, increase to such a degree as to destroy their responsibility of the individual. In such cases the instinct closely resembles the rut in the lower animals.

H. This state may be accompanied with delusions of fear.

I. In a woman the sexual desire is normally increased just before and just after menstruation.

J. The great desire of consumptives is occasionally remarkable, often lasting up to a few hours before death.

K. Poisons may cause it, such as cantharides.

L. It may be constantly present or it may show periodicity or exacerbations and remissions.

M. It is without doubt the cause of many women adopting a life of prostitution and of many men becoming confirmed rakes, without moral principle in this regard or self-control.

N. A tendency to excesses in other ways frequently accompanies this increased sexual desire.

Ques. In what different ways may this hyperaesthesia manifest itself?

Ans.

A. In normal intercourse.

P. In masturbation or masturbation.

C. In sodomy.

D. In pederasty.

E. In bestiality.

F. In rape.

Ques. What forms may the crime of rape take in these individuals?

a. Rape on young children.

b. Rape on adult virgins.

c. Rape on adult married women.

d. Rape on old women.

e. Rape on young boys.

Ques. How is sexual paraesthesia to be distinguished from mere moral perversity?

Ans. 1. The moral perverse are usually of the following classes of people:

A. Impotent masturbators, whose organs no longer respond to accustomed stimuli, and who are consequently unable to perform the sexual act in a normal manner.

B. Those weakened by sexual excesses who still retain the desire for coitus, but are unable to perform the act in a normal manner.

C. Sensual people confined in prisons and, consequently, unable to obtain the companionship of the opposite sex.

D. Sailors on shipboard, during long voy-

ages. (It is said that the government of a certain European State of considerable importance was accustomed to provide female goats for the use of her sailors on her men-of-war.)

E. Soldiers in garrisons situated remote from larger towns.

F. Boys and girls in the country, where the normal satisfaction of the sexual desire is inconvenient.

G. Girls in boarding school.

H. Nuns in convents.

1. Theological students in college.

2. They all return to normal coitus when opportunity offers and the social restrictions are removed.

3. It may be said that they indulge their sexual instincts in unnatural ways because they are unable conveniently to indulge them in the normal manner.

4. In true paraesthesia the preference is for the unnatural method, and frequently abhorrence for any other.

5. There is almost invariably a neurotic family and personal history.

6. The abnormal preference usually dates from the very first development of sexual life.

7. There is never any shame or remorse manifested for indulgence in the abnormal method, as these ways seem to them to be perfectly right and proper.

8. Every act of a sexual nature which does not tend to the perpetuation of the species may be deemed perverse.

Ques. How is sexual paraesthesia classified?

Ans. 1. Those who have a sexual preference for the opposite sex with a perverse activity of the instinct.

2. Those who have an abhorrence for the opposite sex but a preference for the same sex substituted, so called homo-sexuality.

Ques. What varieties are shown among those who have a perverted instinct towards the opposite sex?

Ans. A. Sadism, where there is a desire to inflict cruelty of some sort on the companion of intercourse.

B. Masochism, where there is a desire to have the sexual companion inflict some acts of cruelty or humiliation on the perverted individual.

C. Fetishism, where there is a necessity to have present some article appertaining to a woman in order to secure proper erection.

Ques. What points concerning Sadism are of medi-legal interest?

Ans. a. Some slight acts of cruelty, such as biting or scratching the companion of intercourse may fall within physiological limits.

b. It is supposed to have arisen in the witnessing of human sacrifices in company with sensual mysteries to heathen gods.

c. There are many cases on record in the history of the degenerate Roman Em-

perors. They were accustomed to find sexual pleasure in the torture and mutilation of their victims.

d. Love and anger are active and intense emotions, and when strong, closely resembles each other.

e. Sadistic acts are much more frequent in men than in women, for in normal intercourse the active and aggressive role is played by the male.

f. Among animals the male often pursues the female, who pretends to try to escape, this pursuit resembling somewhat that of a beast of prey.

g. The observation of and engagement in fights and battles, or witnessing paintings of them, frequently arouses sexual feeling, as also may the sight of blood.

h. Many savages in our day practice the marriage by capture, using force, and even blows, to render the woman powerless, before obtaining the satisfaction of sexual desire.

i. These acts vary in severity and often the desire to indulge in them be controlled for a time, but as the sexual act is incomplete without them and the desire still remains, they yield sooner or later and are scarcely responsible afterwards.

j. They may be used to stimulate erection, or after the act as a sort of completion, the sexual desire remaining still unsatisfied, or they may take the place of the sexual act.

k. The negro rapists of this country are often natural examples.

Ques. In what ways does sadism manifest itself?

Ans. a. In lust murder, where the desire is to kill the companion of intercourse.

b. In anthropophagia, or desire to eat parts of the flesh of the murdered victim, often the genital organs.

c. In the desire to mutilate and violate the dead body of the victim.

d. In necrophilia, where the dead body is exhumed and violated. Here the desire seems to be to overcome all contrary will on the part of the sexual companion, the dead body acting as a sufficient stimulus.

e. The dead body may be simply cut up and mutilated, the individual not daring to do this with a living woman.

f. The desire for stabbing, whipping or beating the partner of intercourse with a club is not an infrequent form.

g. The desire for the defilement of women, or tearing their clothing, or tramping upon them, is not an infrequent form.

h. There may be the desire to murder or beat little boys, instead of women.

i. Sexual cannibalism is sometimes seen in animal life.

j. There may exist only symbolic sadism or a simple desire to make the pretense of abuse. Great anger may be simulated and a play arranged, simulating murder and mutilation before erection is possible.

k. The same desire may manifest itself in killing animals and watching their death struggles.

l. They may engage in masturbation and call up the image to their minds of killing and mutilating some woman.

m. Some are highly excited sexually only by being a spectator at a funeral.

n. Some have the woman to apply leeches to the pudendum until blood runs freely from it and this is supposed to excite them sexually.

o. In one case it was manifested by a desire simply to apply lather to the face of the woman and shave it off with a razor.

p. The poetic idea of the vampire or blood-sucking woman was taken from certain women who become violently excited sexually on seeing blood flow from the wounds of their lovers, though the sadistic act is infrequent in women.

q. Sadism is closely allied to and may be associated with sexual hyperaesthesia.

Ques. What points are of medico-legal interest concerning masochism?

Ans. a. The name is derived from Sacher Masoch, who wrote romances and novels describing this sort of perversion.

b. It is direct opposite to sadism. In that the desire is to inflict cruelty and cause pain, while in this it is to suffer pain and be subjected to force and cruelty.

c. It has its origin in religious worship, where self-immolation is practiced, such as may be observed among the flagellants.

d. There is almost always an inherited neurotic disposition.

e. The number of cases is very large and presents all the degrees of the perversion and a gradation of all the acts, from the most repulsive and monstrous to the most silly.

f. The idea is opposed by the instinct of self-preservation, so that there is no history of murder or serious injury, as in sadism.

g. Some times the masochistic acts are performed before intercourse to induce erection, sometimes after the sexual act and sometimes they take the place of the act.

h. It is known among Russian women as a physiological act.

i. Masochism is most frequent among women and is only an intensification of their natural disposition.

j. It is possible that sadism and masochism may exist at different times in the same person.

k. The masochist feels no pain from the acts of flagellation or cruelty, because the mind is preoccupied with the sensual thought, or if pain is felt there is an over compensation of physical pleasure.

Ques. In what ways does the masochism manifest itself?

Ans. a. By flagellation with the whip.

b. By boot and shoe tramping, the man

desiring the woman to walk over him or beat him with her shoes.

c. Symbolic masochism, where there is no pain inflicted and only a play or drama is arranged in an artificial manner to represent great tyranny and oppression.

d. In some cases the man has a desire to suck a woman's toes and the more dirty and filthy both woman and toes are the better the charm is supposed to work.

e. Some have the same desire to be defiled by the woman as some sadists have to defile the partner of intercourse.

f. It occasionally manifests itself in the shape of cunni-lingus and other repulsive acts of that nature, even mixing the food with faeces and urine.

Ques. What points are of medico-legal importance concerning fetishism?

Ans. a. The preference for certain features of female or male beauty may be considered physiological.

b. They call to mind religious reverence for relics, symbols, holy objects, amulets, etc.

c. It is most likely the cause of sexual selection.

d. In the life of every fetishist there may be assumed to have been some event which determined the association of lustful feeling, perhaps with a single impression in early youth. Henceforth a repetition of the same event suggests the same feeling of sexual pleasure.

e. It is not always possible to say where physiological fetishism ends and pathological fetishism begins, but it is safe to say that perversion exists where the sexual act or sexual pleasure is impossible without the fetish.

Ques. In what different ways does fetishism manifest itself?

Ans. a. It may manifest itself in preference for a certain part of the female body, as the hand, foot, breast or hair.

b. It may manifest itself in a preference for some article of female attire, such as a glove, shoe, handkerchief, dress or pair of drawers.

c. It may manifest itself in a preference for some special material of which female attire is manufactured, as fur, velvet or silk.

d. They may use these objects to excite erection and afterwards have intercourse, or they may handle them, at the same time masturbating, or the simple handling of the articles may induce all the satisfaction desired.

e. When the desired portion of the female body is removable, we have assaults, in the attempt to obtain that part, such as the hair.

f. Occasionally potency is only possible on beholding the woman dressed in certain attire.

Ques. How is Homo-sexuality explained?

Ans. A. The child is neuter gender. It

has not sexuality. Its sexual organism, when present, is a reflex act and entirely without psychical counterpart.

B. As the child grows up it becomes distinguished by clothing, education and occupation.

C. With the inception of anatomical change of life there occurs a corresponding mental differentiation.

D. Modesty in a child is an affair of education, but in youth and maidenhood it becomes an imperative necessity.

E. This physical condition is developed from suggestion and not in accordance with the organs developed, so that when the suggestion prevalent at the time of the transformation of puberty, is contrary to the normal, the effect may be psychical homo-sexuality.

F. This preference may show itself almost from birth as a congenital anomaly, or it may be acquired, but there is always some degree of neurotic heritage.

G. It occurs in both sexes, but the largest number of cases occur among men, perhaps on account of the difficulty of acquiring the history of female cases.

Ques. What degrees of change does homo-sexuality present in the congenital variety?

Ans. a. Psychical sexual hermaphroditism, with decided homo-sexual feeling and preference. There remains still, potency with the opposite sex.

b. No inclination towards the opposite

sex at all, with absolute impotence with them.

c. Complete effemination and virginity, where the individual assumes all the psychical characteristics of the opposite sex.

d. Where the psychical condition is accompanied by the bodily conformation of the opposite sex in every particular save the organs of generation.

Ques. What degrees of change are manifested in the acquired variety of homo-sexuality?

Ans. a. Simple reversion of sexual feeling.

b. Eviration and defemination with no restorative change.

c. Stage of transition to metamorphosis sexualis paranoica.

d. Sexualis paranoica.

Ques. How does homo-sexuality manifest itself?

Ans. A. In masturbation with the image of a beloved person of the same sex present in the mind. This is frequently the origin of the perversion, the suggestion increasing in potency as age increases.

B. In association of persons of the same sex in mutual masturbation.

C. In sodomy and lesbianism, both passive and active.

D. Assuming the dress and manner of life peculiar to the opposite sex.

E. In murderous acts prompted by jealousy and delusions of persecution, which accompany the paranoia.

CHAPTER XXXVII.

LIFE INSURANCE.

Question. What is life insurance?

Answer. It is a contract whereby the insurer, in consideration of a certain sum of money, called premium, either in a gross sum or periodical payments, proportioned to age, sex, profession, state of health and other circumstances of the person whose life is insured, undertakes to pay to the person for whose benefit the insurance is made, a stipulated sum or equivalent annuity, upon the death of the individual whose life is insured, or at his attaining a certain age.

Ques. What is an insurance policy?

Ans. It is the written deed, setting forth the contract.

Ques. In what ways are physicians employed in connection with life insurance?

Ans. 1. In making a careful examination of the person about to be insured as to his present physical condition, habits, occupation and manner of life and his personal and family history of disease, so that the insurers may have some rational knowledge of the risk which they assume.

2. In interpreting to the courts the meaning of certain medical terms employed in the policy.

3. In establishing the identity of a dead

body claimed to be that of a person insured.

4. In establishing the exact cause of death, in case of an accident policy.

5. In making report of injuries in cases where an indemnification for time lost on account of sickness or disability is stipulated.

Ques. What is meant by Expectation of Life?

Ans. The number of years which a thousand persons of a certain age will average to live.

Ques. What is the equation by which this expectation is usually reckoned?

Ans. The expectation equals two-thirds of eighty, less the present age.

Ques. What questions concerning a man's family history are of importance from a life insurance point of view?

Ans. 1. The question of inherited disease.

2. The question of inherited traits of character.

Ques. What diseased conditions are usually considered hereditary?

Ans. A. Insanity which may be inherited direct from insane parents or from a neurotic disposition in the family ancestry.

Ques. How may this neurotic disposition manifest itself?

Ans. a. By hysteria.

b. By epileptic fits, convulsions, falling sickness, or periods of unconsciousness.

c. By catalepsy, somnambulism and susceptibility to hypnotic influence.

d. By hypochondriasis.

e. By psychopathia sexualis.

f. By paralysis, both sensory and motor.

g. By neuralgia.

h. By suicidal tendencies.

i. By criminal or pauperistic tendencies.

j. By certain skin affections.

B. Tuberculosis may be inherited directly from consumptive parents, or in the form of a weak constitution, handed down as a family characteristic, with a predisposition to lung difficulties. The disease may also be acquired by contact with those afflicted with the disease, if this contact be one of constant association, in the same house.

Ques. How does inherited tuberculosis manifest itself?

Ans. a. By scrofulous ulcers.

b. By chronic discharges.

c. By diseased joints.

d. By fistulae.

e. By chronic coughs and colds.

f. By light body weight compared to height.

g. By chronic dyspepsia.

h. By rapid pulse and wide difference between the rate of pulse sitting and standing.

i. By bent shoulders and thin chest.

j. By deficient expansion of chest.

C. Rheumatism or uric acid diathesis.

Ques. How does this diathesis manifest itself?

Ans. a. By grating of the joints on motion.

b. By tendency to inflammations, both in and around the joint.

c. By gout.

d. By myalgia, or painful diseases of the muscles.

e. By apoplexy and aneurism, resulting from diseased arteries.

f. By tendency to pneumonia.

g. By tendency to iritis.

h. By tendency to cystitis and stone in the bladder.

i. By tendency to pericarditis and endocarditis.

j. By tendency to kidney inflammations.

D. Syphilis.

Ques. How is inherited syphilis manifested?

Ans. a. By curious shaped teeth.

b. By suppurative bone diseases and enlargement of bones.

c. By pains in bones at night.

d. By diseases of the brain and spinal cord.

e. By diseases of the skin.

f. By various bodily deformities.

g. By enlarged glands.

E. Cancer, the danger in this case arising both from inheritance and contagion.

Ques. What moral characteristics should be noted and guarded against both as to their hereditary influence and the contagion of early environment?

Ans. A. Tendency to indulgence in alcoholic liquors.

B. Tendency to narcotics.

C. Tendency to suicide.

D. Tendency to crime.

E. Tendency to prostitution.

F. Tendency to pauperism.

Ques. What matters of personal history should be inquired into on account of their influence on the present condition and the liability of diseased conditions to return?

Ans. A. Previous habits as to alcohol, tobacco, and other narcotics.

B. Previous sexual excesses.

C. Previous occupation.

D. Previous residence.

E. Previous diseases.

Ques. What way do the alcohol and narcotic habits effect a risk?

Ans. a. They are likely to return.

b. The statements of the applicant in regard to them are apt to be untrue, as regards the extent of indulgence. They always greatly underrate their excesses.

c. They weaken the body and create a tendency to nervous disease, when indulged to any considerable extent.

d. Their indulgence leads to exposure, to all sorts of weather and into drunken brawls where the danger to mortal injury is great.

e. They also frequently lead to death from overdosage and acute poisoning.

Ques. What bearing have sexual excesses on a risk?

Ans. a. They indicate a neurotic disposition.

b. They increase the susceptibility to general diseases.

c. They expose the individual to constant danger of venereal disease.

d. As a result of such previous indulgence, concealed venereal diseases, or their pathological effects are usually present.

Ques. What effect may previous occupation have upon a risk?

Ans. a. There is always a tendency for a person to return to a former occupation, and if this occupation is unfavorable or extra hazzardous, it should be taken into account.

b. Occupations which lead to exposure are apt to leave traces of diseases, usually acquired by exposure to inclement weather.

c. Confined indoor life is very apt to leave the body very susceptible to diseases acquired by contagion and exposure.

d. Underground work is generally unfavorable to health and long life.

e. All occupations which predispose to deformity of the body are unfavorable, on

account of the influence of such deformities on future health.

f. Factory work, where the employes are exposed to large amounts of dust, are unfavorable on account of its effect upon the lungs.

Ques. What facts in regard to previous residence affect a risk?

Ans. a. People just entering a climate to which they are unaccustomed generally suffer from the change in their general health.

b. Malarial climates are very apt to leave effects in the shape of ague cake and tendency to periodic fevers.

Ques. What diseases are apt to permanently deteriorate the system or have a liability to return and thus affect a risk?

Ans.

a. All diathetic diseases.

b. All diseases of the general system which are not half limited.

c. All local diseases accompanied with any considerable inflammation, or skin eruption.

Ques. What facts regarding applicant's present condition should be carefully noted?

Ans. A. The apparent age, if above that stated in petition.

B. The present occupation, if extra hazardous.

C. The locality of his residence, if healthy or otherwise.

D. His habits as regards alcohol, tobacco, or other narcotics. It is always best to obtain a statement as to the exact amount consumed each day. What would be temperate for one man may be excessive for another.

E. Married or single?

F. Is the applicant living at home, or traveling about the country with no fixed place of abode?

G. Is the applicant perfectly developed physically, or are there deformities?

H. What is the height and weight?

I. What are the most prominent and permanent marks of identification?

J. Are all the bodily functions performed in a normal manner?

K. Has the applicant any disease tending to shorten life? All diseased conditions present should be noted, no matter how trivial.

Ques. What medical terms used in policies are liable to require interpretation in the courts?

Ans. A. Whether a certain disease has a tendency to shorten life or not.

B. What constitutes sound bodily health.

C. What constitutes intemperate habits.

D. Whether a certain injury amounts to total disability.

E. What constitutes a serious illness or injury.

Q. What is the duty of the medical jurist in these emergencies?

Ans. To state the facts as far as possible and leave the decision to the court and jury.

Ques. What general points concerning life insurance are of medico-legal interest?

Ans. 1. The value of a physician's services in such cases is considerable and the work should not be done unless a good, liberal fee is to be forthcoming.

2. A physician should give no information to a life insurance company concerning the health of any former patient of his without the permission of his patient, in writing.

3. The beneficiary must have some insurable interest in the person insured.

4. The courts hold that the insured must answer all questions truthfully and must not withhold any material circumstance connected with his health, which might, if known, tend to affect the risk.

5. The courts always interpret the terms of the policy in a manner as favorable to the insured as possible.

6. If the applicant warrant the truth of his answers, the slightest false statement will invalidate the policy, no matter whether it be material to the risk or not, but if the truth is only represented to the best of applicant's knowledge and belief, the misstatement must be shown to be material before the courts will allow it to invalidate the risk.

7. When the questions are answered by the applicant and the answers written down by the examining physician, some care should be taken that the applicant reads the answers before signing the petition, as the physician, especially if he be the servant of the company, may be accused of writing the answers differently from the way they were given.

CHAPTER XXXVIII.

CRIMINOLOGY.

Question. What is crime?

Answer. It is the disobedience of statute law, either by omission or commission.

Ques. What facts should lead a physician to acquire a comprehensive knowledge of the subject of crime?

Ans. 1. Crime is a social disease.

2. Crime has its origin in physical and mental defects, either congenital or ac-

quired, which are more or less amenable to treatment.

3. These defects limit responsibility, concerning which a medical jurist is frequently called upon to render an opinion.

4. In the fullness of time the physician will be consulted by the authorities as to the best methods of preventing crime.

5. The physician should endeavor to be-

come an educated man, thoroughly informed on all subjects which affect the social life of the people.

Ques. With what is crime frequently confounded?

Ans. With disobedience of the moral law, commonly known under the titles of sin, vice, wrong-doing, iniquity, etc.

Ques. What is the origin and foundation of the moral law?

Ans. It has its origin in and is founded upon the so-called inalienable rights of mankind.

Ques. What are these rights in the order of their appearance and development?

Ans. 1. The right of self-defense and preservation.

2. The right to defend the family, tribe and nation.

3. The right to defend the house, home or castle.

4. The right to bear arms and weapons for these defensive purposes.

5. The right to the possession of tools and implements for the aid of mechanical labor, when manufactured by the man himself.

6. The right to obtain subsistence as easily as possible.

7. The right to retain food already procured.

8. The right of free access to the land and other gifts of nature such as air, sunshine and water, from which to procure food.

9. The right of free worship of the Deity.

Ques. What disputed and doubtful rights have their origin in the abuse of these rights just mentioned?

Ans. 1. The right to form offensive and defensive alliances.

2. The right to things obtained by conquest.

3. The right of the strong to govern the weak, or the right of the majority to rule in a community.

4. The right of the rich to oppress the poor.

5. The right to exclusive ownership of land acquired of former tenants by purchase.

6. The right of the majority to prescribe the form of worship of the minority.

Ques. Why are these claimed rights disputed.

Ans. Because they cannot be exercised without depriving others of some of their inalienable rights, before mentioned.

Ques. How did statute laws originate?

Ans. They originated in the rules by which the conquerer managed his slaves and serfs.

Ques. What were the primitive statute laws, in effect?

Ans. 1. You must pay regularly your tithe or tribute.

2. You must plant and gather your master's crops, neglecting your own to do so, if necessary.

3. You must attend your master's cattle.

4. You must help at any time to defend your master's cattle, even at the risk of your life.

5. You must turn out in pursuit of any criminal should the hue and cry be raised.

6. You must cover your fire at a certain time every night.

7. You must yield your wife to your master for the first night after marriage, and your daughter whenever he may desire her.

8. You must always stand in humble obsequence when your master or any of his family pass by, and approach his presence on your knees.

9. You must reveal to your master any and all conspiracies which may come to your knowledge against him or any of his family, shielding no one, even though it be of your own blood and kindred.

10. You must not shoot or kill any game on your master's preserves.

11. You must not leave your own hundred or parish.

12. You must not enter into any conspiracy to escape, or in any way injure your master or any of his family in life, limb or property.

13. You must never speak of your master or any of his family in any terms but those of highest reverence, praise and adulation.

Ques. How was disobedience of these laws punished?

Ans. By mutilation, torture and death.

Ques. By what stages of development have these laws reached their present state?

Ans. 1. Slaves and serfs always tended to pass into the possession of fewer and fewer hands, the great conquerors controlling all.

2. Absolute power, when exerted in cruelty, provokes assassination.

3. Large interests must always be intrusted to subordinates of less ability than the chief and who are susceptible to treachery.

4. There is always a tendency among conquerors to bite off more than they can chew. In thus attempting to control too many slaves they invite their own overthrow. All the liberties which the common people enjoy have been obtained by fighting against and overthrowing the governing power. Thus revolutions have had great reforming influence.

5. The chiefs of successful rebellion have become the revolutionary saints and heroes of the government which they established. These men began in crime, as criminals, developed genius, gained victories and end in sainthood.

6. Every change has been marked by a steady growth of the idea of human equality and that the only rightful authority a government could possess must be derived from the consent of the governed.

Ques. What facts and circumstances have encouraged this development?

Ans. 1. The sons of conquerors were frequently nursed and tended by captive women, and in that way attachments were formed that rendered the sons more lenient than their fathers had been, thus securing in some measure willing service. Anointed and hereditary kings were generally more easy and lenient than emperors, and at the same time less vigilant.

2. Flattery and adulation are pleasant, and through desire for this men came to value the good opinion of their subjects.

3. Hereditary kings, while at the same time more lenient, were also through luxurious living and excesses more weak and degenerate, making their overthrow easier.

4. Intermarriage had its effect, as also did family relationship.

5. Miscegenation produced its effect. The females of the conquered race generally felt themselves honored by sexual congress with the male conquerors. The offspring of such unions formed a middle ground in which the two races might meet.

6. The intermixture of language had its effect.

7. Common enemies often made common friends.

8. Common sorrows elicited common sympathy.

9. Education and a better observance of cause and effect, through its influence produced its effect.

10. The moral teaching of a certain Nazarine had its effect, and also through the organization growing out of the doctrines which he taught, many people became united in religion. The thought that there existed a universal brotherhood in Christianity often tempered the condition of captives taken in battle, though if any were exempted from paying tribute on this account history does not mention the fact.

11. The material betterment that resulted from the workman being allowed to retain more and more of the product of his labor has increased the mental capacity of the laborers, and consequently the productiveness of labor. The fact that property could be accumulated has reconciled many people to a stable government whereby such property can be protected.

12. The decrease in religious superstition, allowing free thought and free speech, has had its effect.

Ques. What sorts of men disobey the statute laws of a country?

Ans. 1. Those who are so ignorant as not to be aware of its provisions. This ignorance does not excuse from retribution either from civil or moral law, or even the physical laws of nature.

2. Those who through disease or faulty development of the brain and consequent

mental alienation are held to be irresponsible for their acts.

3. Those who through sudden passion become temporarily irresponsible.

4. Those who through indulgence in alcoholic drinks are rendered temporarily irresponsible.

5. Those who are brought up in a criminal environment and follow crime as a sort of hereditary occupation.

6. Those who are brought up to regard the law as their natural enemy or a sort of trap wherein the unwary might be caught, but are entirely without a proper view of the benefits of law.

7. Those who look upon the law as an institution by which the respectable and decorous, which is themselves, are to govern and keep in their proper places the disrespectful and dissolute. This class will use any means or exert any influence upon elections, legislatures and courts to keep those whom they please to call the lower classes under full control.

Ques. What causes tend to alienate people from the law and thus cause crime?

Ans. 1. Unjust and unequal laws.

2. Unjust and unequal enforcement of the law.

3. Severe and unreasonable punishment of crime.

4. Ignorance of the utility and necessity of civil government and law.

5. Want of confidence in elections, legislatures and courts.

6. Enforced idleness.

7. Inability to satisfy the natural appetites.

8. The many in poverty and want viewing the ostentation and extravagance of the opulent few.

9. The over-division of labor consequent upon civilization, placing mankind at the mercy of the distributing power.

10. The sudden introduction of machinery in the place of manual labor, thus depriving many of profitable employment.

11. The progressive concentration of the land, from whom all must primarily subsist, in the hands of fewer and fewer people.

12. The continual temptation afforded to indulgence in alcoholic drinks by the presence of saloons, where they are offered for sale. Their use predisposes to crime in the following ways:

A. By causing poverty and want, leading to crimes against property both by the indulger and his family.

B. By causing men to become quarrelsome, thus leading to arrests for vagrancy, indecency or idleness.

D. By rendering men irresponsible and insane, temporarily, thus leading to murders, rapes and other crimes of large magnitude.

E. By causing permanent dementia,

bringing the individual to become a burden on the public.

F. By causing hereditary mental and bodily disease to descend to the offspring, thus entailing instability of character and poor resistance against temptation to commit crime or become dependent on the community.

G. The habit of alcoholic drinking produces a family environment which predisposes to crime among the children, who, through the bad example set before them become worthless and careless, unable to make a living honestly or maintain any steady industry.

13. The continued temptation permitted in the shape of gambling devices of all kinds, from the wheel of fortune to the merchants' exchange, leading to the false hope of acquiring wealth by other methods than labor.

14. The extravagant display of the description and methods of crime in the public papers and periodicals, leading to great familiarity with them.

15. The teaching of the best methods of eluding the penalties of disobedience and escaping conviction and arrest in the institutions created for the punishment of crime.

16. The inculcation of the religious dogma, that sins and wrongs may be forgiven and that in some mysterious process of imputed righteousness a person may escape the moral penalty and consequences of his acts, or that some other person's goodness may offset their culpability.

Ques. Why are general statistics of little aid in the study of criminology?

Ans. 1. Because of statutory defects in regard to reporting cases.

2. Because of maladministration of the criminal laws.

3. Because of the impossibility of properly defining certain crimes.

Ques. What are the main defects in the statutes?

Ans. 1. The records are not made to show the required facts.

2. The reports are not all made to the same officers.

3. There is no penalty attached to the neglect to render proper reports and keep complete records.

Ques. What are the main defects in the administration of the criminal laws?

Ans. 1. Inefficiency of the police, which leads to:

A. Many undetected criminals who thus evade punishment.

B. Many unarrested criminals, who make terms with the police.

C. Many criminals reside in rural districts where there are no police.

D. Many criminals, whom the private individual offended refuses to appear against which include:

a. Defaulters, a portion of the defalcation being returned.

b. Guardians, who appropriate trust funds.

c. Abortionists, a very large number.

d. Panderers to vice, such as saloon-keepers and keepers of houses of prostitution.

e. Receivers of stolen goods.

f. Crime capitalists, or instigators to crime.

Ques. Why do private individuals, thus wronged, refuse to prosecute?

Ans. I. On account of indifference, the value of the article stolen or the amount of damage done being less than the time spent in attendance on courts.

II. On account of intimidation or fear of revenge, if complaint is made, or fear of exposing their own crimes.

III. On account of want of confidence in the courts to do anything.

IV. Compounding felonies, the wronged party being paid a portion of his loss on condition that he will not prosecute.

V. On account of dislike for police court notoriety.

2. Defects in the administration of justice.

A. Many go unprosecuted on account of

a. Straw bail.

b. Nolle prosequi.

c. Absence of important witnesses, mostly bought off.

d. Frequent postponement of the trial.

B. Unjustly acquitted by sympathetic juries.

C. Acceptance of pleas of guilty of minor offenses, when the accused should be made to answer for a greater offense.

D. Misinterpreting the import of evidence and trying an accused person for a greater offense of which he is not guilty and must certainly be acquitted, when he is guilty of a lighter offense and ought to be convicted.

E. Immunity of those persons who turn state's evidence and expose their confederates.

3. Falsification of the records.

4. Defects in the records due—

A. The neglect of county justices to transmit duplicate copies of commitments and findable cases to county clerks, as required.

B. The neglect of many sheriffs to keep jail registers and consequent inability to make correct returns to the Secretary of State, as to persons committed to the county jail for offenses punishable by incarceration in such places.

C. Neglect of county clerks to make correct monthly returns of indictments and sentences in courts of record, to the Secretary of State.

D. The careless transcribing of returns.

E. The mutilation of the records of courts, whole pages often being cut out,

bodily, and the record of entire cases being destroyed.

F. The failure to identify habitual criminals, neglect of the Bertillon system of measurement.

G. The falsification of the name, age and nationality by the accused.

H. The registering as facts, statements made by prisoners, which are entirely fabulous and fictitious, referring especially to—

a. Their previous religious training and preference.

b. Their education, as to reading and writing; many writing their names and no more.

c. Married or single; many say married so as to be allowed the privilege of corresponding with some disreputable acquaintance outside.

5. Public apathy as to enforcing the laws.

6. Maudlin public sympathy with criminals of high degree, which comes on when justice is long delayed.

Ques. What facts should appear in the record of every convicted criminal, for use in the proper treatment of his individual case, and for purposes of general study?

Ans. I. Parental antecedents, on account of heredity and early environment.

II. Personal history and association.

III. Record of pauperism.

IV. Industrial training.

V. School education.

VI. Moral and religious training.

VII. Physical and mental characteristics.

VIII. Vices.

IX. Property and financial condition.

X. Criminal history.

XI. Recommendations for reformatory treatment.

XII. Addresses.

Ques. What points are important relative to the parental antecedents?

Ans. 1. Are the parents consanguinous, and to what degree?

2. Were the parents temperate or given to drink, and how badly?

3. Were the parents industrious or idle? What trade did they follow?

4. Were the parents chaste or unchaste?

5. Were the parents educated, and to what degree?

6. Were the parents religiously inclined?

7. Did the parents acquire property, or were they destitute?

8. Did the parents ever receive financial assistance from the city or town?

9. What are their present ages or date and cause of death of each?

10. Were the parents ever arrested for crime?

11. How are the other relatives as to criminality and pauperism—grand-parents, uncles, cousins, etc.?

Ques. What facts are available as regards the personal history of the criminal?

Ans. 1. Legitimate or illegitimate.

2. Color.

3. Age.

4. Married, single, widowed, or divorced.

5. Illicit sexual relations.

6. Number of children; boys, girls; legitimate, illegitimate.

7. Was his childhood homeless; cause?

A. Abandonment of father or mother.

B. Death of father or mother.

C. Imprisonment of father or mother.

D. Pauperism of father or mother.

8. Was other guardian appointed; who?

9. Character of guardian.

10. Brothers and sisters, how many, order of birth.

11. How long in the United States, if a foreigner.

Ques. What points should be recorded regarding criminal's history of pauperism?

Ans. 1. Has criminal ever received aid at public expense?

2. What form?—

A. Outdoor aid.

B. Poorhouse.

C. Vagrancy.

D. Public hospital.

3. At what age was relief furnished?

4. For how long a time?

5. What was the aggregate amount of relief furnished?

6. How was the home broken up.

A. By death in the family.

B. By abandonment by the head of the family.

C. By imprisonment of the head of the family.

D. Want of work.

E. Loss of property.

Ques. What points should be ascertained in regard to the criminal's industrial training?

Ans. 1. Is the criminal industrious or lazy?

2. Was he apprenticed?

3. What number of years did he serve?

4. To what trade was he apprenticed?

5. Was the occupation fully learned?

6. If not, why not?

7. How much time has been lost since?

8. How does criminal employ spare time?

9. What is the character of his working companions?

10. Where does he meet them?

11. How many of them have ever been convicted of crime?

12. Did criminal ever serve in state's prison?

13. Did criminal ever serve in army or navy?

14. Did criminal ever keep a rum shop?

15. Did criminal ever keep a brothel?

Ques. What facts are important regarding the education of the criminal?

Ans.

1. Does he read; how much?

2. Does he write well or ill, or only name?

3. Does he know how to cipher?

4. Does he possess a common school education?

5. How many years did he go to school?
 6. Did he play truant?
 7. Did he receive any higher education?
 8. What degree and where?
 9. Did he study any learned profession, like medicine, law or divinity?
 10. Has he any accomplishments, like music, drawing, painting, etc.?
 11. Did he show any considerable genius in them?
 12. Is he intelligent and bright?
 13. Has he any useful knowledge by which he is able to make a fair living?
 14. Is he ignorant, stolid and indifferent?
- Ques. What facts regarding criminal's religious and moral training ought to be recorded?

Ans. 1. Has the criminal any sense of moral responsibility?

2. Does criminal realize the criminal or wrongful nature of the offense which he has committed?

3. Does criminal acknowledge any obligation to divine law?

4. Under what religious preference was he brought up?

5. What sort of actions does he consider wrong?

6. What are the dominant traits of his character?

Ques. What points should be noted as regards the physical condition of the criminal and his history of health?

Ans. 1. His general health.

2. Constitutional temperament.

3. Is he fit to stand hard manual labor?

4. Can he, most likely, endure sedentary employment?

5. What is the appearance of his countenance and are his features correct and symmetrical?

6. What is the shape of the head?

A. Facial angle.

B. Projection of occiput.

C. Distance between bridge of nose and hair line.

D. Comparative height above a line drawn from outer corner of the eye through the auditory orifice.

E. Breadth between zygomatic prominences.

F. Projection of the jaws and strength of jaw.

G. Darwin's reversion point on the ear.

H. Shape and number of teeth, projection of canines.

I. Evidences of frontal suture.

7. General description of eyes, color and condition of eyesight.

8. Condition of skin, color, eruptions, etc.

9. Is criminal deaf or dumb, or does he possess any impediment in his speech of any sort?

10. Are there any congenital malformations about the body?

11. Physical injuries.

12. State of nervous system.

13. State of respiratory system.

14. State of circulatory system.

15. State of the digestion and nutrition.

16. State of the osseous system.

17. State of the genito-urinary system.

18. Is there any physical disease that can be treated with prospect of alleviation or cure?

Ques. What points relative to criminal's mental condition and history should be ascertained?

Ans. 1. Is there general feebleness of mind?

2. Is there history of chorea, epilepsy, insomnia, illusions, hallucinations, or paralysis?

3. Is this history hereditary?

4. Is there moral perversion as well as mental?

5. Does this perversion lead to morbid practices?

6. What are these practices?

7. Has the criminal ever been insane?

8. What kind of insanity; give its description?

9. What was the cause to which it was attributed?

10. What was the consequences?

11. Was criminal ever subjected to restraint on this account?

Ques. What facts relative to the vices of the criminal ought to be recorded?

Ans.

1. Gambling.

2. Opium habit, hitting the pipe.

3. Prostitution, when practiced for first time.

4. How habit began.

5. Masturbation, when began, to what extent practiced.

6. Are there any sexual perversions?

7. What is his history of inebriety?

A. Occasional drinker.

B. Moderate drinker.

C. Occasional intoxication.

D. Habitual drinker.

E. Habitual intoxication.

F. Periodic drinker to intoxication.

G. Delirium tremens.

H. What age was habit begun?

I. How long has habit been fixed?

J. What effect has it had on the physical condition of the criminal?

8. Tobacco habit, smoke, chew, snuff, dip and quantity consumed.

Ques. What points are important regarding the financial condition, past and present, of the criminal?

Ans. 1. Has criminal inherited property; when and how much?

2. Has criminal acquired property; when and how much and how acquired?

3. Has criminal lost property; when, how much and how did he lose it?

4. Is he possessed of any means at present?

5. Has he wealthy and indulgent relatives?

Ques. What facts concerning his criminal history should be recorded?

Ans. 1. First seduction into culpable offense.

2. What age did such seduction occur?
3. What necessity, fancied or real, led to it?
4. What temptation or agency led to it?
5. What vice or passion was gratified by it?
6. What disease weakened moral stability?
7. Was he out of employment at the time?
8. Was there sickness in the family at the time?
9. What offense was committed?
10. What age was his first trial brought before the courts?
11. Was he convicted or acquitted?
12. Was he really innocent or guilty?
13. What was the aggregate number of offenses before the first trial?
14. Total number of arrests?
15. How many and what indictments are pending?
16. Is the criminal a first offender?
17. Is he a habitual or born criminal?
18. Is he a contriver of crime?
19. When did he become a contriver of crime?
20. What is his criminal line of business or specialty?
21. On what scale does he conduct this business?
22. What is his mode of doing business?
23. If a thief, how is the stolen property disposed of?
24. What is the aggregate value of property stolen at the time of conviction?
25. What is the aggregate booty acquired during career?
26. What is the aggregate number of offenses during career?
27. What was the largest steal?
28. For what crime has he been convicted, this offense?
29. If theft, article stolen?
30. If murder or assault, with what instrument?
31. If rape, age of woman?
32. For what length of time has he been sentenced?
33. Date of conviction?
34. Name of prison where criminal has been confined?
35. How long has criminal served in the aggregate?

Ques. What facts should be recorded as regards the line of treatment indicated for the criminal's reform?

Ans. 1. What is the prognosis or likelihood of reform?

2. What means are recommended?
3. Does he need industrial training?
4. Does he simply need moral guidance?
5. Should he constantly be kept under restraint?

6. Should he be constantly kept under watch and supervision?

Ques. What addresses should be kept on record?

- Ans. 1. Where born.
2. Where resided, all the different places.
 3. Where he committed his last crime.
 4. Where he was tried.
 5. Where the person lives who was injured by him.
 6. Address of best friend.
 7. Address of worst enemy.
 8. Address of family physician.
 9. Father's birth place.
 10. Mother's birth place.
 11. Where are his criminal haunts?
 12. Address of his nearest relatives.

Ques. What facts are of importance concerning the subject of criminology, to us in Missouri?

Ans. 1. At the last census (1890) there were in the United States 82,000 inmates of prisons and houses of correction, convicted of crime, of whom 15,000 were juvenile offenders.

2. This number varies with the population, increasing from year to year, as the population increases.

3. This number is found to vary with the season of the year, the financial status of the country and the plentitude of the crops.

4. This variation is not confined to any particular crime, or class of crimes, but applies to all offenses against property and personal crimes as well.

5. As a rule, a person once convicted of crime, continues in crime ever after, punishment having no reforming effect, for the following reasons—

A. A great difficulty of obtaining employment in any honest occupation after the fact is known that the person has served time in a prison.

B. The recognition by habitual criminals as a jail bird and fresh inticement into crime by them.

C. Their careful education in crime and the best methods of avoiding detection, which is obtained in prisons.

D. Hereditary weakness of mind and criminal tendency.

E. Habitual criminal association, enforced after serving time.

F. Certain acquired cravings, which demand more money than the former criminal can earn at any honest occupation.

6. In the City of St. Louis, in the year 1896, then a city of over 600,000 inhabitants, the following may be noted—

A. This year 24,000 arrests were made.

B. Nine hundred thousand dollars was the expense of the police system, all paid out, without any appreciable lessening of crime, but rather accompanied by an increase. This sum amounts to \$1.50 for every man, woman and child in the city.

C. One hundred thousand arrests had been made in five years preceding.

D. The city jail contained 300 inmates, composed of—

- a. Accused persons awaiting trial.
- b. Convicted persons awaiting trial.
- c. Convicted murderers awaiting execution.

d. Criminals of minor degree, sentenced to confinement for a certain length of time in the jail.

e. Suspected persons held by the arbitrary power of the police, without warrant or indictment.

E. The jail contains 120 cells, where the above prisoners are lodged with no distinction save that of sex and cleanliness of person.

a. The suspected with the accused and convicted.

b. The born criminal with the victim of necessity or irresponsibility.

c. The juvenile first offender with the notorious and depraved.

d. The drunk with the sober.

e. The chaste with the prostitute.

F. All are confined in absolute idleness, without recreation, without light after 8 o'clock at night, and without literature except as it may be furnished by friends outside.

G. The city house of refuge contains 300 inmates, no separation being made between:

a. The homeless waifs sent on account of the inability of their parents or guardians to support them.

b. The imbecile children sent there for weak mind and non-support of parents.

c. Children sent there for crimes committed of every description, who have been nursed and brought up in crime and taught to follow it as a means of subsistence.

H. No effort is made to teach these children either primitive mechanics, ordinary morality or simple book learning.

I. Some attempt is made to keep the children clean, but all have to bathe in one pool of water and a very small pool, at that, and the water is not changed very often either.

J. It is a fact that nearly every child sent out of this institution becomes a criminal.

7. In the Missouri State Penitentiary, at Jefferson City, there are 1,200 inmates (1897).

A. The factory is well appointed and the cells kept apparently clean.

B. The convicts are hired out to a contractor for so much a day each.

C. No attempt is made to educate the convicts either in morals or mechanics, but they are allowed to take books from the prison library.

D. The most popular book is "The Count of Monte Christo," by Dumas.

E. An ignominious striped uniform is forced to be worn by the convicts with the idea of making escape difficult.

F. No distinction is made between con-

victs; those in the same rooms work and associate together—

a. The old with the young.

b. Confirmed, hopeless and born criminals with first offenders.

c. Those guilty of personal crimes with those guilty of crimes against property.

G. The length of service is regulated entirely by the trial judge's idea of the gravity of the crime and the social status and financial condition of the criminal.

H. The warden is a farmer, has had no experience in handling criminals, is entirely ignorant of the literature on the subject of criminology (1897).

I. A person once confined in this institution henceforth devotes his life to crime and exists through the profits of his crime. It is a college where all manner of crime is taught.

8. The Boonville reformatory for boys contains 100 inmates.

A. The boys are under eighteen years of age when convicted.

B. The boys are here taught complete trades and all sorts of primitive mechanics.

C. The boys are taught moral principles, temperate habits, self-control and the various literary requirements for a common school education.

D. No convict uniform is enforced.

E. Decent and nutritious food is provided.

F. Corporal punishment is almost never resorted to.

G. The sentence is, within a certain degree, dependent on the advance made by the boys under treatment.

H. Provision is made for discharge, under parole, after a certain length of time.

I. All the buildings on the place have been erected by the boys themselves, from the very clay and trees which composed the raw materials, for the bricks and lumber.

J. All the garden and farm products used by the boys are raised by the labor of the boys themselves, on the land.

K. The clothing used by the boys is also manufactured by them.

L. The result of this method of treatment is that out of 100 boys, eighty make honest, industrious citizens, ten remain idle and inefficient and the other ten relapse into crime and criminal association.

9. The Chillicothe Industrial School for Girls is managed, as nearly as possible, on the same principle as the Boonville institution and with practically the same results:

10. There exists a small class of born, habitual criminals who cannot be reformed by any known treatment. Their brains are incapable of development to such a degree that they may become independent and honest. These seem to be doomed to lead a predatory and corrupting life and should be isolated from society in such a manner as to prevent mental and moral contagion.

11. As existence becomes more and more precarious and difficult, there is a continual sliding down of one class of society into the next lower. The rapidity of this degradation increases as financial inequality increases.

12. Most of the officers to whom is intrusted the care of criminals are entirely ignorant of the science of criminology, unacquainted with the dispositions and manners of criminals, serve short terms in office and are quickly removed at the instance of political spoilsmen.

13. The tendency of civilization seems to be to react against the cruelty of the middle ages and reduce the severity of punishment and render more mild criminal procedure in the courts. This latter is done by increasing the difficulties of conviction.

14. The tendency of the born habitual criminal of the male sex is to debauchery, drunkenness and sexual excesses. All his crimes are turned to supplying his cravings in these directions.

15. The tendency of the born habitual criminal of the female sex is towards prostitution, for by this means she is best able to supply the vanities of dress and display.

Ques. What effect has literary education upon crime?

Ans. Its effect is to determine the kind of crime to be committed, rather than to increase or diminish crime in the aggregate, thus—

1. Where there is little or no education the tendency is to personal crimes, assaults, rapes, drunkenness.

2. Those having fair common school education, tend to commit crimes against property, such as theft and burglary.

3. High school and artistic education has a tendency to lead its possessors into the graver crimes against property, such as forgery, counterfeiting, embezzlement, corruption of elections, legislatures and courts.

4. With college education may come inefficiency and inability to labor and make good use of literary attainments, but these people are seldom criminal. The education becomes the ambition. This does not apply to all people, who have wasted their time in attendance on colleges, but those who possess a fair knowledge of those subjects usually taught in collegiate institutions. When they do not commit crime it is usually in the furtherance of impracticable schemes for the benefit of humanity at large. Those

guilty of high treason are often of this class.

Ques. What are the characteristics of the habitual criminal as a class?

Ans. 1. Among them congenital physical anomalies are about twice as frequent as among other people.

2. They speak a language, or rather a dialect, rich in idioms and slang, which is entirely peculiar to themselves, though apparently corrupted from the language which is ordinarily spoken in the country where they live. It cannot be understood by those unacquainted with it.

3. Their sexual relations are almost without formality.

4. The legitimate children are apt to be better able to maintain themselves than the illegitimate.

5. Interbreeding increases the criminal tendency.

6. Those of the children who do not lead criminal lives are nearly all paupers or receive help at some period of their lives from the public funds.

7. It is not infrequent that during the middle portion of their lives they may be self-supporting while showing pauperistic or criminal tendencies both in youth and old age.

8. They are improvident, spending in riot and debauchery the results of their depredation. The small amounts which they obtain by theft and fraud are frittered away and soon gone.

9. They are notoriously idle and inefficient about anything in the line of work which they attempt to do. They cannot retain positions. They do nothing well and are a great trouble to those who employ them. Hence they are constantly out of work and have to depend on crime or public funds for subsistence. The energy of body that is ordinarily given to labor is by them devoted to sexual excesses.

10. They are very often deeply religious, often regular attendants on divine worship, but their religion does not seem to affect their conduct in the least.

11. They are usually neurotic in family history and frequently suffer from epilepsy, chorea, stammering and other nervous diseases.

12. They show no resistance to temptation and are controlled entirely by their appetites.

CHAPTER XXXIX.

PENOLOGY.

Question. What is penology?

Answer. It is the science of eradicating crime from a community.

Ques. What four phases, plans or systems, have comprised the practice of penology in all ages?

Ans. 1. Retaliation or revenge for crime committed. The punishment of crime.

2. Attempted repression and intimidation of would-be-criminals. The terror or fear system.

3. Attempted reformation and rehabilita-

tion of criminals and their reconciliation with the law.

4. Attempted prevention of crime by alteration in the social system.

Ques. By what right can the government of a country practice penology?

Ans. 1. The right of self-preservation. Government is necessary in proportion to the civilization of a people, to enable large numbers to live in close proximity. Some individuals are led to see their private interests in ways of living and acting, which are entirely contrary to the interests of the community, as a whole, and in their dissatisfaction would destroy the government, hence its right to defend itself against the attacks which such individuals might make.

2. One of the main duties and necessities of government is the protection of all the people. Crime usually injures some of the people, either in person or property. Such protection, in order to be effective, must act previous to the commission of the crime. It is the right of the government, therefore, to prevent, in any way possible, such crime.

3. The right of might. The majority of the people desire the statutes created by the government to be obeyed and force the minority to obedience by all motives and inducements that present themselves.

4. There are great and valuable privileges obtained by life in a community. The community has a right in return to demand of the individual compliance with such requirements and laws as it may think necessary to the securing of these benefits and privileges. The individual has the alternating privilege of leaving the community and living by himself, where social obligations do not devolve upon him.

5. In the practice of penology, the right of the government is limited to these motives:

- A. The prevention of crime.
- B. The protection of some individual in the state.
- C. The preservation of organized government and securing to every member of the community its benefits and privileges.
- D. The reformation and rehabilitation of an offender.
6. In order to maintain this right, everything done to any individual offender must be done as humanely as possible, and no more force, discomfort or restriction used than the necessity of the case requires.

Ques. What are legitimate procedures to which governments may resort, through their officers, to preserve the ends and motives mentioned?

Ans. 1. When an attempt is made to commit crime, force may be employed to prevent its completion, either by the officers of the law or by the individual against whom the crime is about to be committed, and to the degree necessary to prevent crime and no further, even though it be necessary to take the life of the criminal.

2. When a crime has been committed, the law may compel restitution to the individual wronged, both in actual and exemplary damages, where such restitution is possible.

3. When a member of society has been guilty of crime so often or has shown a disposition to commit crime continuously, he may rightfully be secluded from the rest of the community and placed under such permanent restraint as may be necessary to prevent him leading a criminal existence, and this restraint may be continued as long as necessary, even though it extend to the limit of a life time. This does not include the right to prevent such person from working for the support of himself and family, and in this he should be restricted as little as possible, and neither should he be deprived of other enjoyments and pleasures of life which may be attainable in such seclusion.

4. Where it seems possible to reform a criminal and make of him a good citizen, no educative means should be spared by society to accomplish that end. Following this motive, he may be instructed in—

- A. Primitive mechanics.
- B. The procedure of law.
- C. Civil government and its necessity.
- D. Political and financial economy.
- E. General ethics.
- F. Ordinary book learning, such as is taught in schools.
- G. Religion.

5. Such legislative enactments may be made as will do away with the causes, both individual and social, which lead to crime in a community.

6. There is no argument either moral or economical which can justify revenge for crime already committed, except as far as financial restitution to the individual injured may go.

Ques. What certain ways present themselves by which a person possessing a criminal intent may be prevented from committing crime?

- Ans. 1. By execution, killing the would-be criminal.
2. By incarceration, permanently, in a prison.
3. By constant police supervision, ready to apply force if necessary.
4. By reforming the disposition to commit crime and making of the would-be criminal a law abiding and patriotic citizen.
5. By doing away with the causes and motives in society which lead to criminal intent.

Ques. What constitutes the present system of dealing with crime in this country?

Ans. 1. The old revenge system, endeavor to make the punishment fit the crime, the severity and amount of punishment administered varying with the gravity of the crime committed. This system presupposes all people to be of the same sound and disposing mind, actuated by the same motives

and susceptible to the same springs of action.

2. Nothing is done until after the crime is committed and then only with the individual or individuals committing it.

3. The community acts upon the theory that the punishment of one person for committing crime will prevent other persons from committing crime when they hear of it.

4. The community also acts upon the theory that the punishment of a person for committing crime will prevent him from committing crime in the future, both in the same and other ways.

5. These punishments consist of—

- A. Fines.
- B. Fines and incarceration.
- C. Incarceration either with or without hard labor, for a longer or shorter time.
- D. Incarceration with restriction of diet, hard labor, and solitude.
- E. Corporal punishment, whipping, etc.
- F. Death penalty by hanging or electrocution.

Ques. What system was followed in ancient times and up to the time of the French Revolution?

Ans. 1. Galley slavery. The ancient primitive craft were difficult to row and it was hard to obtain willing employes for such purpose. Escape from such service was difficult, hence it was found convenient to employ convicts in this way, and often prisoners of war received the same fate.

2. Banishment. This was first made prominent in Rome, for no Roman citizen could, under the laws, be put to death.

3. Transportation. Large ship loads of convicts were originally sent out to desert islands and either turned loose or confined in criminal colonies there. These islands were generally situated in some unsanitary locality where the convicts died very soon, if they ever lived through the long voyages, in overcrowded and pestilential prison ships. In this way all available places were soon occupied, so that this method of punishment is seldom resorted to in these days by any government.

4. The death penalty by the cruelest methods possible. This was inflicted upon the theory that when punishment is administered as an example to others, the more terrible the example the greater would be its restraining power. The various methods were:

- A. Boiling in oil.
- B. Burning at the stake.
- C. Roasting in ovens.
- D. Breaking on the wheel.
- E. Hanging, drawing and quartering.
- F. Strangling and garroting.
- G. Weight and pressure.
- H. Flesh tearing with hooks.
- I. Scavenger's daughter.
- J. Drowning in a sack.
- K. Poisoning.
- L. The head press.

M. Beheading with the axe or sword.

N. Stoning.

O. Crucifixion.

P. Devouring by wild beasts.

5. Mutilation, such as—

- A. Branding.
- B. Burning out the eyes.
- C. Cutting out the tongue.
- D. Pulling out the hair and nails.
- E. Cropping the ears.
- F. Cutting off the hands and feet.
- G. Whipping with different instruments.
- H. Castration.

6. Humiliation and holding up to public ridicule, such as—

- A. The stocks.
- B. The pillory.
- C. The ducking stool.
- D. Tarring and feathering.

7. Compurgation. If a crime was committed in a certain parish, the parish was compelled to surrender up the offender, or in lieu thereof, pay a large fine.

Ques. for what use were prisons and dungeons employed in those days?

Ans. 1. For confining debtors until their friends and relations paid their debts.

2. For confining accused persons awaiting trial or torture.

3. For confining captives, awaiting ransom.

4. For confining convicted persons awaiting execution or transportation.

5. For hiding suspected enemies of the government during the pleasure of the governing power.

Ques. What are the main objections to the revenge system of treating crime?

Ans. 1. It has been found by experience that increased severity of punishment increases crime, as it tends to destroy the notion of the sacredness of human life.

2. Excessive severity of punishment has a tendency to prevent conviction, unless law maker and judge are one and the same person, as in small monarchical governments.

3. The death penalty, when public, causes blood-thirstiness among the people who witness it, and if private, has no effect as an example.

4. Humiliation and mutilation destroy self-respect and prevent reformation and rehabilitation of the criminal.

5. Banishment soon becomes impossible for crime in all save political offenses, for the inhabitants of the country to which the criminals are sent soon object, very strenuously, to having that class of people fostered on them. The fact that the same inhabitants were, formerly, criminals themselves, does not alter the case.

6. While practicing these methods which are of no use in decreasing crime, those methods which are of use are neglected and the money wasted.

Ques. What constitutes the modern scientific method of dealing with crime?

Ans. 1. Modification of criminal proce-

dures so as to secure conviction in all cases where crime has actually been committed.

2. Scientific classification of criminals and the separation of the habitual criminals from the reformatable, and the juvenile offenders from those accomplished in crime.

3. Thorough, careful instruction in primitive mechanics, so that self-support by honest labor will be possible.

4. Strict but kindly discipline, so that self-control may be acquired.

5. Careful attention to bodily and mental health, with the best hygienic surroundings in the way of lodging, food and clothing.

6. Such instruction in literature, ethics, law, political economy and religion, as may be possible and expedient.

7. Indefinite sentence. The criminal should remain under treatment until his criminal propensities are cured, if it takes all his life.

8. The employment furnished should be on a reservation of land, set apart for that purpose, and a strong endeavor should be made to produce everything necessary for the criminals on this reformatory reservation. It is estimated that one acre of land to every ten people is sufficient for that purpose, if properly cared for. It is absolutely necessary that the labor of criminals shall be, as far as possible, non-competitive with a non-marketable product.

9. Careful provision should be made for the future employment of the criminal after his departure from the reformatory, so as to avoid the necessity of a relapse into crime for subsistence.

10. Those who after a reasonable length of time show no signs of improvement should be separated entirely from all save their own class.

Ques. What characteristics separate the code of punishment from the code of procedure?

Ans. 1. The code of punishment applies to the criminal only, and the law-abiding citizen has no part in it.

2. The code of procedure or the process of criminal law is for the benefit of the honest, law-abiding citizen, who through accident may be falsely accused of crime. The trial is to prevent the conviction of the innocent, not to secure the punishment of the guilty.

Ques. Through what stages has criminal procedure developed into its present state of perfection?

Ans. 1. The religious stage with its ordeals and combats.

2. The legal stage with its accompanying of torture, for the purpose of inducing confession and the exposure of accomplices. This is founded upon the theory that knowledge of guilt is guilty knowledge and may be extorted by any means possible.

3. Political stage with private convictions and jury system to protect the citizen from encroachments of the governing power.

4. The scientific stage, with the employment of expert knowledge and its experimental results systematically collected and studied.

Ques. What three processes should constitute scientific criminal procedure?

Ans. 1. The collection of all the evidence attainable concerning the accused person and the crime.

2. The thorough study and discussion of the evidence collected.

3. The decision on the evidence.

Ques. What suggestions may be made for changes in the present code of criminal procedure?

Ans. 1. The presumption of innocence should only apply to cases of persons who have never been convicted of crime.

2. The prosecution should present all possible evidence as to the previous life history of the accused, not for the purpose of establishing guilt or innocence of any particular crime, but to furnish data on which to base future treatment of the criminal in case of conviction.

3. Careful examination by a competent physician should be made into the physical, mental and hereditary characteristics of the accused, and all abnormalities noted and the report of this examination made a part of the evidence.

4. The control of criminal courts, reformatory, eleemosynary and penal institutions should be, as far as possible, removed from politics and placed in the hands of those who have made special study of criminal and delinquent anthropology and psychology.

Ques. What classification will be found most useful in devising means of treatment most likely to prove successful?

Ans. 1. Those who are essentially not criminal, of sound mind and body, honest, industrious and of good stock, usually guilty of crimes against the person. These men lack self-control and are greatly benefited by imprisonment, if the sentence is not too long. They need protection from after recognition by habitual criminals and from contamination by associating with such. Their self-respect must be preserved and they should be given opportunity for mental culture. They should form one class and be kept isolated.

2. First offenders, who fall because they are vain, self-indulgent and in the toils of lewd women. They abuse trusts by embezzlement and represent a class which are quite too numerous. When detected they often escape prosecution altogether for the sake of their friends and because they are personally liked. The type is that of a descending family in which the misuse of good faculties and the abuse of opportunities conspire to lead astray, but the good association of youth and the dear recollections of home make reformation easy.

3. First offenders, who have been led off

into crime by bad associations. These are the children of honest parents, who from indulgence or want of capacity have not brought them up judiciously.

Note—In these three classes we have what may be called sporadic crime, in which the primary disorder is only the movement of a momentary poison, kindled partly by feelings of self-respect or educational neglect, uncomplicated by insane or criminal hereditary tendencies, and in whom the criminal habit has not become fixed.

4. Convicts of low vitality, born of pauper parents, left orphans in childhood, so that they have drifted into habitual crime.

5. Illegitimate children, born of intemperate parents, with vicious and criminal propensities, who have been trained in crime.

Note—These two types have in addition to parental neglect, an hereditary tendency to crime, pauperism and premature death. Many are reformable and if such treatment is to be applied, a knowledge of these ancestral defects is necessary, as the heredity is the chief factor in their lives.

6. Contrivers of crime, who look upon crime as a legitimate business, yet attended by ordinary risks, "Who don't do no light things," but "Go in for big money," such as corrupting elections, legislators, or courts, cornering food supplies, etc. These are very dangerous to society and entirely irreclaimable. Conviction is very difficult owing to the influence which they exert over political affairs. Complete isolation from all other criminals is absolutely necessary.

7. Active executors of crime, who have passed their 35th year and are casting about to abandon the field of executors of crime to enter that of crime capitalists.

8. Panderers to the vices of criminals, the aiders, abettors and facilitators of crime.

Note—In these three classes, whatever

may have been the road which each has traveled, whether forecasted by hereditary transmission or induced by misdirected childhood, are all past reform. Dangerous and desperate, they are of service to the State only, as examples of the austerity of her justice.

9. Men who have acquired epilepsy or insanity and whose crimes are those of the perverted mind.

10. Unfortunates who have inherited nervous or brain diseases which destroy the moral sense.

11. Persons who have forms of nervous disease which destroy the control over motion and do acts of impulse which result in murders, attempts to kill, rape, etc.

Note—These should receive medical treatment in asylums and be looked upon as entirely irresponsible.

Ques. What facts are of importance regarding the subject of penology?

Ans. 1. Before the institutions established for reformatory purposes can do any real good, the State must change its attitude of enmity to one of friendliness towards the criminal and make him emphatically to understand that the State bears no ill will for crimes already committed, but in its wisdom desires to prevent repetition of the offense.

2. It has been found that what no amount of force could accomplish towards reformation of a criminal, the slightest personal interest would. Hence in the indeterminate sentence, the criminal in a measure hold the key to his own prison.

3. The phase of religion which should be taught exclusively to criminals is the phase of humanitarianism. The positive virtues are the best, not the negative.

4. Every effort should be made to secure the confidence of the criminal and this should never be abused.

CHAPTER XL.

MALPRACTICE.

Question. What is malpractice?

Answer. It is unlawful, bad or unskillful practice of medicine, surgery, dentistry or pharmacy.

Ques. How is malpractice classified?

Ans. 1. Criminal malpractice, where drugs are given or operations done—

A. With intent to injure the patient.

B. With intent to perform some unlawful operation.

C. Causing injury through gross ignorance.

D. Causing injury through gross negligence.

2. Civil malpractice, where the physician is liable to the patient in damages for injury that may result to him on account of

any negligence or ignorance of the physician.

Ques. What are some of the most common cases of criminal malpractice?

Ans. A. Performing abortions.

B. Neglect to comply with practice laws.

C. Neglect to report contagious diseases.

D. Seduction under pretense of treatment.

Ques. What are the two main forms of civil malpractice?

Ans. A. Negligent malpractice where from some want of attention on the part of the physician the patient fails to receive such treatment as his situation required.

B. Ignorant malpractice is the administration of medicines or the treatment of disease or injury in a way calculated to do

harm and which actually does do harm, and which would not have been done by an ordinarily skilled and educated surgeon or physician in that locality.

Ques. What points in relation to malpractice are of medico-legal interest?

Ans. 1. Physicians, surgeons, dentists and apothecaries, holding themselves out to the world as such, engage that they possess the reasonable and ordinary qualifications of their profession and are bound to exercise reasonable and ordinary care, skill and diligence when attempting to treat a case.

2. This care, skill and diligence which the average physician and surgeon possesses and exercises in that general neighborhood, not the highest and best in the whole country, nor the highest and best in that neighborhood.

3. The skill required in a sparsely settled locality, a long distance away from the centers of learning, would not be as great as that expected of a physician living in a large city.

4. Physicians and surgeons are expected to keep up with the times and employ the best methods in use in their locality.

5. If the physician or surgeon departs from the generally approved methods of practice and the patient receive injury thereby, he will be held responsible no matter how good his intentions or expectations were.

6. Physicians are bound to give the patient the benefit of their best judgment, but will not be held liable for a mere mistake or error of their judgment.

7. If the patient in any way contributes to his injury by neglect to obey the reasonable instructions and directions of his physician, he cannot recover in a suit for malpractice.

8. The same rule holds good where the physical weakness of the patient or his natural temperament is a contributory cause of the injury.

9. A physician is in no way responsible for results save as they may result directly from his neglect or treatment.

10. The patient may recover damages from his physician for injury to his reputation or feelings, sustained through the physician having revealed his privileged communication.

11. Damages of an exemplary or punitive kind may be assessed by the jury to compensate the patient for the pain and suffering caused by the neglect or want or skill of his physician.

12. An error of diagnosis is considered of less importance, providing the treatment adopted was appropriate to such erroneous diagnosis, than an error of treatment, had the diagnosis been correct.

13. It is very difficult to prove bad treatment of a case, where a correct diagnosis

is admitted, because authorities differ widely.

14. The fact that a surgical operation had to be performed in an emergency, under unfavorable conditions, will do much to exculpate the physician.

15. Punishment on a criminal charge is no bar to recovery of damages in a civil suit.

Ques. What are most of the accidents liable to result in suits for malpractice against physicians and surgeons?

Ans. 1. Septic infection.

2. Syphilitic infection, in vaccination.

3. Tetanus infection.

4. Uncertainty as to how a certain wound ought to be treated.

5. Traumatic delirium.

6. Fat embolism.

7. Administration of overdose of a certain drug, on account of carelessness or ignorance, causing poisoning.

8. Administration of the wrong drug on account of reading the prescription wrong.

9. Administration of an impure drug.

10. Administration of the wrong drug through the receptacle being improperly labelled.

11. Death from the administration of anaesthetics.

Ques. What precautions should be observed in the administration of anaesthetics when such precautions are possible?

Ans. A. Have as pure ether or chloroform as can be procured.

B. Have a skilled assistant, if possible, as the assistant will then bear his share of the responsibility. If the assistant is unskilled the responsibility will all fall on the physician.

C. Have a witness present when administering an anaesthetic to a female on account of the dreams which may come to her and which may induce her to charge the physician with rape.

D. Careful examination of heart, lungs and urine should be made before the administration, and should any disease exist, the drug should not be given unless the patient is willing to assume all the risk.

E. The pulse and respiration should be carefully watched and on the least sign of abnormality the drug should be stopped until normal conditions are restored.

F. The stomach and bowels should be empty, if possible, before the drug is administered.

G. No constriction should be allowed about the neck or chest.

H. The head should be placed on a level with the trunk and, if possible, with a chance to lower the head to 45 degrees should any trouble occur.

I. Great danger may result from the tongue of the patient falling backward into the throat; when it so falls, it should be pulled upward and forward.

J. Chloroform should never be poured

out, but should be dropped on to a mask or napkin.

K. The operation should not be begun while the patient is half conscious.

L. The alcohol habit will sometimes render ether narcosis impossible and chloroform must be used, though ether is to be preferred, as far as the number of deaths is concerned.

M. It is thought that the effect of chloroform, in paralyzing the heart, is transmitted through the nerves of the nose and that a good precaution may be found in cocaineizing the mucous membrane of the nose.

N. The patient's head must be protected from the violence which it might receive through the patient's struggles during the first effects of the anaesthetic. The eyes and mucous membrane of the mouth and nose should also be guarded.

O. Care should be taken not to use ether in a room with a fire or lamp burning near the patient, for it is very inflammable and severe burns may result from its explosion.

P. Useful restoratives should be at hand, such as electricity, stimulants for hypodermic injection, cold douch, etc.

Q. Chloroform should always be kept in black bottles and in a dark place, for it will deteriorate in quality and its dangerous effects rendered more likely on use.

12. Should any harm result from the administration of drugs, or in the performance of a surgical operation while the physician was under the influence of intoxicating liquors, it would be considered negligent practice.

13. Passive malpractice may, if it be gross, render a physician liable for damages, but sins of omission are not, as a rule, considered of the same gravity as sins of commission.

Ques. What legal questions relative to malpractice must be settled by medical testimony?

Ans. 1. Has injury been done?

2. Did the medical attendant exhibit, in his treatment of the case, a want of knowledge of the principles of his art, which are the common property of the profession in his neighborhood and which have been sufficiently long established to become known to him had he been ordinarily watchful for improvement in his art?

3. Did the attendant depart from the established rules governing cases like this, in any material degree. If so, what good reason had he for so doing.

4. Was a given amount of care and a given frequency of visits equal to the ordinary amount of attention necessary in a given case?

CHAPTER XLI.

MEDICAL PRACTICE LAWS.

Question. What points are important concerning Medical Practice Laws?

Answer. 1. In establishing practice laws a happy medium should be sought. Too lax rules are conducive of quackery, while too strict rules are very likely to lead to the repeal of all practice laws, leaving no restrictions whatever.

2. Any laws for the benefit of physicians, as a class, or that favor one class of physicians at the expense of another class, are likely to be declared unconstitutional.

3. The courts hold that the state has a right to restrict medical practice to those generally competent, and the following decisions have been rendered:

A. That to cause a physician to conform to certain qualifications is not taking property without due process of law.

B. That the fact that a party has engaged in the practice of medicine a certain number of years does not create a vested right in him so to continue contrary to a new statute.

C. That the exemption of certain physicians who have been in practice prior to a certain date from compliance with certain qualifications enforced on persons just entering practice, does not create a privileged class.

D. Where the law simply requires a diploma for registration, no special kind of diploma can be demanded.

E. Where the law requires a diploma from a reputable medical college in good standing, State Boards of Health have been given discretion in deciding what constituted good standing, subject to review by the courts.

F. Boards have usually been supported in the establishment of a minimum requirement to which all schools in good standing must conform, and if such Board has the power to administer oaths and take testimony, it may, after notification, act upon charges accusing a college of irregularity, and if satisfied of its low standing, refuse to certify its graduates.

4. A medical law may not only provide for the issue of licenses to practice, but for the revocation of such licenses on proof of unprofessional conduct.

Ques. What is unprofessional conduct?

Ans. A. Criminal malpractice.

B. Betrayal of privileged communications.

C. Advertising fraudulent cures and nostrums.

Ques. How is the question of whether certain acts constitute unprofessional conduct determined?

Ans. By the jury, who do not invariably look upon such things with the same eyes as the writers of the medical code of ethics.

Ques. What constitutes proof of the practice of medicine?

Ans. 1. The fact has to be inferred according to the interpretation of the statute.

2. The state will not favor one school more than another, so long as they be legally authorized to practice.

3. If the statute defines the practice of medicine, no act not mentioned in the statute definition will be recognized as such practice.

4. Where practicing or prescribing, for a fee or reward, was forbidden, contrary to the statute, it was held that the actual reception of a fee need not be proved when the intent to take a fee could be presumed from the acts.

5. The actual medicine prescribed or given need not be presented in evidence, for it would not make any difference if the drug in question was simply a bread pill.

6. When the law stated as its object to confine the practice of medicine and surgery to a class of persons who upon examination should be found competent and qualified, it was held that one who pretended to cure disease by manipulation only, was not practicing medicine within the meaning of the law.

7. It was held to be medical practice for a clairvoyant to prescribe remedies, but under a statute which allowed any one to receive compensation for medical services, pro-

viding he had a certificate of good moral character from the mayor of the town, a Christian scientist was allowed to bring suit for a fee.

8. A magnetic healer who advertised to cure disease and gave a death certificate, was held to be practicing medicine.

9. Advertising to cure the opium habit was counted practice of medicine by one court.

10. To administer electricity and sell patent medicines was considered the practice of medicine.

11. A single act of prescribing medicine or treating disease or holding out a sign, or soliciting patients was held to be the practice of medicine, under a law which simply forbade the practice of medicine.

12. A man who advertised to cure cancer prescribed for a pimple on a woman's nose. He removed the pimple and incidentally the nose. This was held to be the practice of medicine.

13. Where the law stated, except in cases of emergency, it was held that emergency meant inability to procure a licensed practitioner and not that the licensed practitioners were unable to cure the case in question.

14. No law will be held constitutional that will prevent any person from receiving such medical aid as it may be possible to procure when a licensed practitioner cannot be obtained.

CHAPTER XLII.

COLLECTION OF FEES.

Ques. What points are of importance concerning the collection of fees for medical services?

Ans. 1. In ancient times a physician's services were presumed by law to have been rendered gratuitously, or for whatever the patient was willing to give, as the office of physician was generally filled by a priest.

2. In this country, in modern times, the patient who receives the services of a physician is presumed to be under contract to pay reasonable and usual fees.

3. The failure to call in other consultants in a case does not increase or diminish the physician's liability in a damage suit.

4. A physician is under no obligation to assume charge of a case unless he wishes.

5. If a physician undertakes a case, even though gratuitously, he is obliged to remain in charge so long as his care is needed, unless he be dismissed or sever his relations upon due notice being given.

6. A judgment for fees in a case prevents a suit for malpractice in that same case.

7. The physician is the best judge of the number of visits necessary.

8. When unskillful or negligent treatment is alleged, the burden of proof is on the part

of those claiming damages, or even claiming exemption from payment of fees.

9. Lack of skill will not be inferred from a bad result. No physician insures success, unless by special contract.

10. The obligation to pay the doctor devolves upon the patient's estate, should he die.

11. The bill for fees of the physician in a person's last illness takes precedence of other claims, along with funeral expenses, etc.

12. It is wise to collect fees as soon as possible after service is rendered.

13. The fact that a case was treated gratuitously does not in any degree excuse malpractice.

14. The law holds that the party summoning a physician is only the agent of the patient, unless he makes special contract to stand good for the fees.

15. It was held that a father was not obliged to pay the physician of his adult married daughter or his adult son, when sick in his house.

16. It was held that the man who took his insane brother to an asylum was not obliged to pay for his treatment unless he promised to so to do.

17. A man who called a physician to attend his wife was not allowed to plead that her divorce from a former husband was incomplete and that he was only the woman's paramour.

18. A wife may contract to pay her physician out of her own personal estate, but unless this contract is specially made, the physician must look to the husband for his pay.

19. If a wife be living in adultery, away from her husband, on account of her own fault, this husband is not liable for her physician's bill, unless by special contract.

20. Mesmeric treatment, including dreams, visions and revelations, were held not to be a necessity of life and that a husband was not liable to pay for them when contracted for by his wife.

21. A father is liable for a child's necessities and is indictable for manslaughter in neglecting to provide a suitable physician to attend on his sick child, should that child die.

22. Inability of the father to pay does not render a child's estate liable for a physician's attendance on the child.

23. If a child has left the parental roof, the father is not liable for medical services unless rendered with his knowledge, consent and approval, although the consent will be inferred, if no objection is made.

24. The servant or agent of a corporation cannot bind the corporation to pay a physician, whom he calls to attend a fellow servant, unless he has special authority to employ a physician or surgeon.

25. When a physician be so employed and notice be given the corporation and the employment was not questioned, the corporation was held liable.

26. A patient is liable for the fees of a consultant, if he accept his services, even though the consultant was summoned by the family physician, with the understanding that he would pay the consultant, the consultant being ignorant.

27. A licensed practitioner may recover fees for his assistants and students, though they be not licensed, and a student or assistant may sue a licensed practitioner for services rendered his patients.

28. Where a coroner has authority to employ a physician to make an autopsy, the physician can collect his fee from the county for having made one, at the request of the coroner, where it be shown that such autopsy was necessary or not.

29. If a physician testify, as an expert on behalf of the prosecution, he can only collect the regular fees of an ordinary witness unless he makes an agreement beforehand.

30. You cannot compel a physician to make an autopsy without paying him his fee, but the autopsy being once made, without the fee, he can be obliged to give testi-

mony as to what was found on such autopsy at the statutory fee of an ordinary witness.

31. A physician in suit for fees will not be allowed to disclose his privileged communication, but it will be just as difficult for the defendant to prove exorbitant charge without making such disclosure himself, so they stand even before the court on that score.

32. The person of a patient is sacred and cannot be made the subject of impertinent study against his or her will. Should this be done, in such a way as admitting unprofessional men to an operation or a case of midwifery, the patient may secure damages against the physician.

33. You cannot enforce a contract for the sale of a corpse.

34. A person cannot replevin an amputated limb if the physician walks off with it.

35. A body, once buried, cannot be removed without permission of the owner of the grave, without judicial authority.

36. It is held that a physician does not violate his privileged communication by reporting a case of contagious disease to the health authorities, and the fact that he so reported the case will not hinder him in a suit for fees.

Ques. What are the disabilities of an unlicensed practitioner of medicine?

Ans. 1. He is liable for the pains and penalties made and provided in cases of unlawful practice.

2. He cannot maintain action for recovery of fees.

3. He is not exempt from jury service.

4. He cannot sign a burial certificate.

5. He is unable to qualify as an expert.

6. His communications with his patients are not privileged.

7. He cannot bring an action for slander if he is denounced as a quack.

Ques. What points are important relative to a physician's partnership?

Ans. 1. Physicians in partnership are liable for the acts of one another within the scope of the partnership.

2. A note given by one physician is a hold on the other, if given for anything of use in a physician's business, but if given just for borrowed money, it won't hold.

3. The good will of a practice is property and its sale is a valid agreement if the other contract not to practice in that locality.

4. An unlicensed person may join partnership with a licensed person and would then be responsible for the acts of the other, though he would not be allowed to treat the patients of the firm.

5. One partner is not liable for the criminal acts of the other, unless on proof he be shown accessory, either before or after the crime.

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